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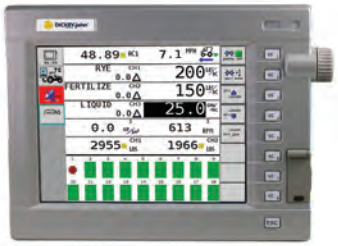
IntelliAg®

AI-120



AI-100

AI-50

Working Set Member Module

Tractor ECU

Master Switch

Working Set Master Module

Don't forget to select a:

- Seed sensor
- Application rate sensor
- Implement lift switch
- Ground speed sensor
- Boom switch module
- Accessory module

Controllers

IntelliAg™ is a control and monitoring system for planters, sprayers, spreaders, and anhydrous applications. The system is designed to the ISO 11783 guideline to operate with any manufacturer's equipment. Modules can be added and configured to fit a variety of needs.

The system includes a choice between three virtual terminal styles that interfaces with specific application control modules referred to as a Working Set Master (WSMT) and Working Set Members (WSMB). The WSMT controls the application of material by interfacing with proportional hydraulic valves and feedback sensors. Optional WSMB's control inputs from sensors, valves, rows monitoring, seed singulation, and spacing quality.

Application specific versions of the WSMT are available for use with:

- Sprayers
- Fertilizer spreaders
- Anhydrous bars
- Planters/grain drills
- Air carts

The minimum requirements to operate an IntelliAg system include a:

- Virtual Terminal
- Master Switch
- Working Set Master (WSMT)
- Harnesses
- Tractor ECU
- CAN Terminators

Optional components include:

- Working Set Member Module
- Boom Switch Module with Planter Output Module
- Remote Test Switch
- Implement Lift Switch

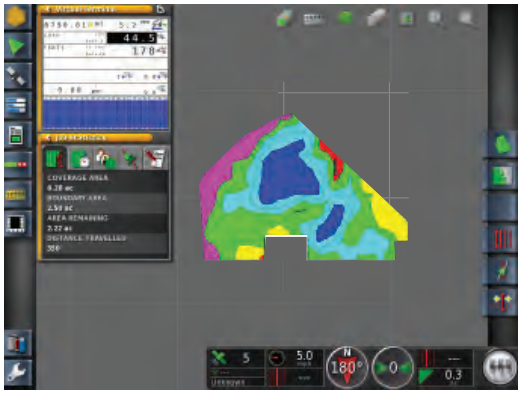
Features/Benefits:

- ISO 11783 conformance allows for one terminal for quick retrofit to tractors and implements
- Standard electrical connector at hitch for convenient plug and play installation
- Full screen alarms identify abnormal or failed operations
- Retains information when power failure occurs
- Logs 'As Applied' data
- Variable rate application capable

12" Virtual Terminal

AI-120

AI-120 Guidance Screen



Imported Variable Rate Map

Don't forget to select a:

- Seed sensor
- Application rate sensor
- Implement lift switch
- Ground speed sensor
- Boom switch module
- Accessory module

The AI-120 virtual terminal display is the main user interface with the IntelliAg system and provides an all-in-one control for planting, spraying, and spreading applications. A dedicated IntelliAg button allows quick viewing access to the IntelliAg display and can also remain open in a miniview window on the guidance screen for viewing both applications simultaneously.

An As Applied job can be started quickly to record as applied data. Several features are available when creating an As Applied job including:

- Creating a field boundary
- Creating exclusion zones
- Creating flag points to mark field obstacles
- Creating headlands
- Using boundary offsets
- Exporting job as a .pdf to a job report

Variable rate control job data is created using a farm management software tool and is imported to the terminal via a USB memory device. Automatic rate adjustment occurs when entering different zones in the prescription map.

Key terminal features:

- Integrated auto section control
- Mini-view windows with drag-and-drop positioning
- Interaction keypads with expandable menus
- Icon-based user interface
- Dashboard readouts provide constant, convenient basic data
- Full-screen views for detailed information

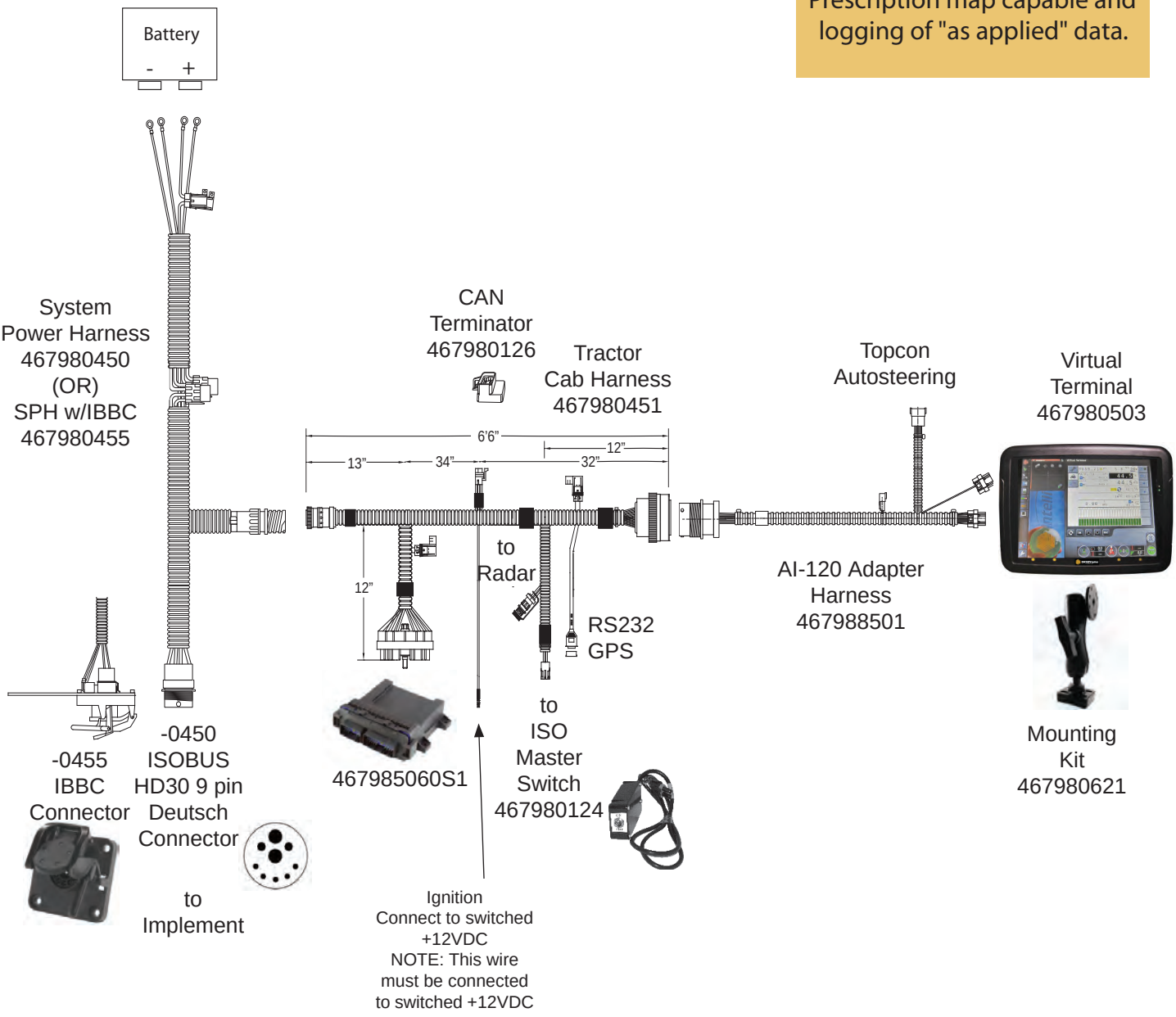
Not compatible with Trimble Autopilot systems

12" Virtual Terminal Kit	
Part Number	**Description**
AI120CABKIT Kits contain one each of the below components.	
46798-0503	Virtual Terminal 12 in. Color Touch Screen
46798-0621	Terminal Mounting Bracket and Hardware
46798-8501	AI-120 Adapter Harness
46798-0126	Mini CAN Terminator
46798-0451A	Tractor Harness
46798-0455	System Power Harness
46798-5060S1	Tractor Electronic Control Unit (TECU)
46798-0124	Master Switch
11011-6416	Ty-Wrap Bundle 64-7 in. and 16-14 in.
11001-1606	12 in. Virtual Terminal Operator's manual
46798-0129	FarmWorks Software Management Tool Trial CD

AI-120 12" Virtual Terminal

Harness Diagram

Prescription map capable and logging of "as applied" data.



10" Virtual Terminal

AI-100

The Virtual Terminal (VT) is mounted inside the tractor cab and is the main user interface with the IntelliAg system.

Virtual Terminal:

- 480 pixel x 480 pixel color graphics touch display
- Rotary knob for scrolling
- Software-defined keys for navigation
- Escape key
- Backlit graphics display for night-time use
- Backlight intensity adjustment
- Large error messages with audible alarm
- English or metric measurements
- Data port to support VT reprogramming on selected modules

10" VT Features:

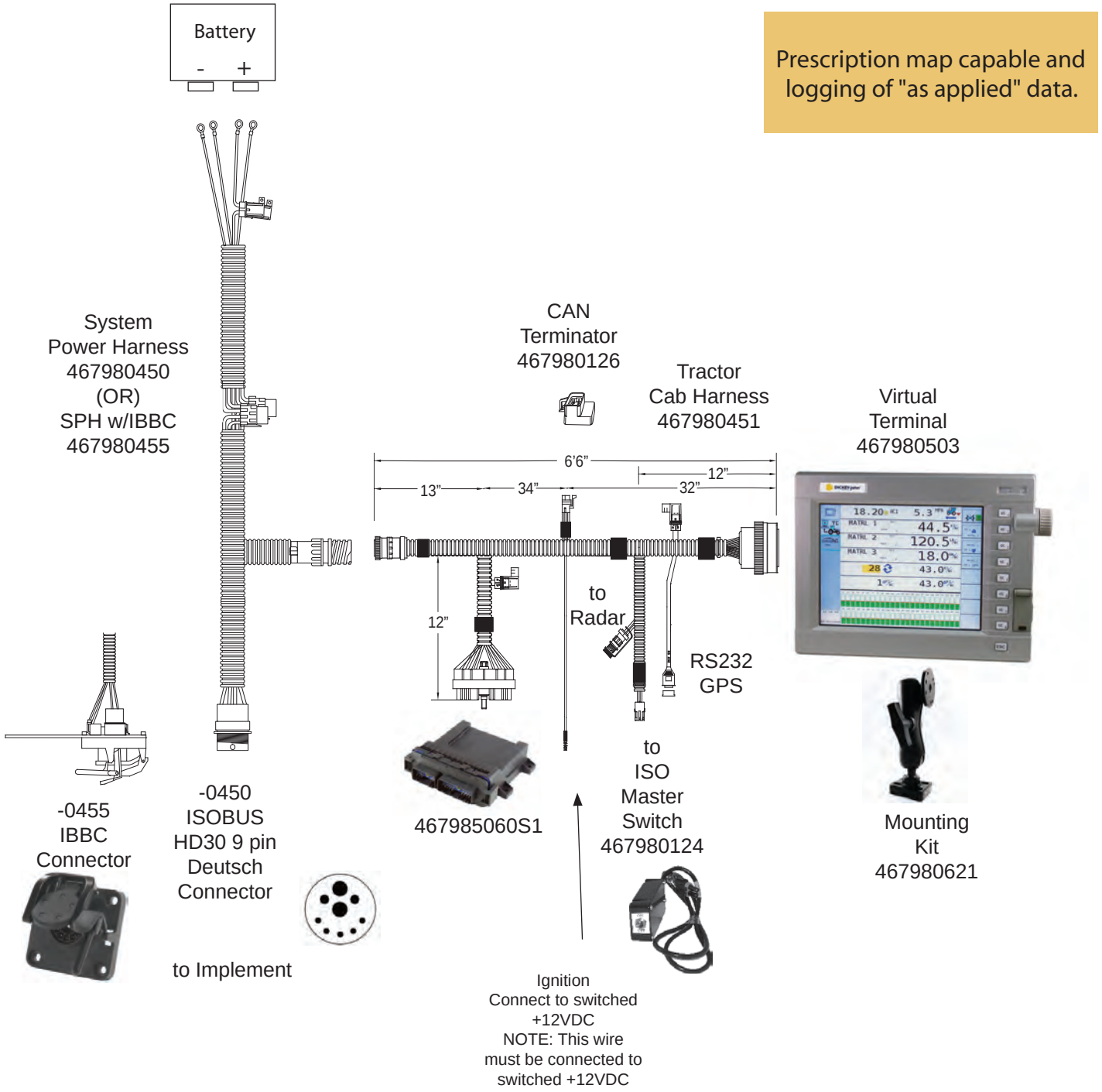
- Touch screen navigation and entry
- 4 channels of variable rate control
- Tractor ECU functionality provides a communication interface for exchanging and controlling commands between the tractor and implement. Supported control functions include power take-off shaft speed, ground speed status, 3-point hitch position, and wheel slip.
- Task Controller feature provides task management of data compiled from all active implements via a GPS signal. Job data is transferred to an implement for variable rate control and collected from an implement for data logging.

10" Virtual Terminal Kit	
Part Number	**Description**
IACABKIT10 Kits contain one each of the below components.	
46798-0503	Virtual Terminal Model A1 10 in. Color Touch Screen
46798-0621	Mounting Kit with Ram 3.04
46798-0124	Master Switch (ISO compatible)
46798-0126	Mini CAN Terminator
46798-0455	Tractor Harness
46798-0450	System Power Harness
46798-5060S1	Tractor Electronic Control Unit (TECU)
11011-6416	Ty-Wrap Bundle 64-7 in. and 16-14 in.
11001-1440	10 in. Virtual Terminal Operator's manual

AI-100 10" Virtual Terminal

Harness Diagram

Prescription map capable and logging of "as applied" data.



5" Virtual Terminal

AI-50

The Virtual Terminal (VT) is mounted inside the tractor cab and is the main user interface with the IntelliAg system.

Virtual Terminal:

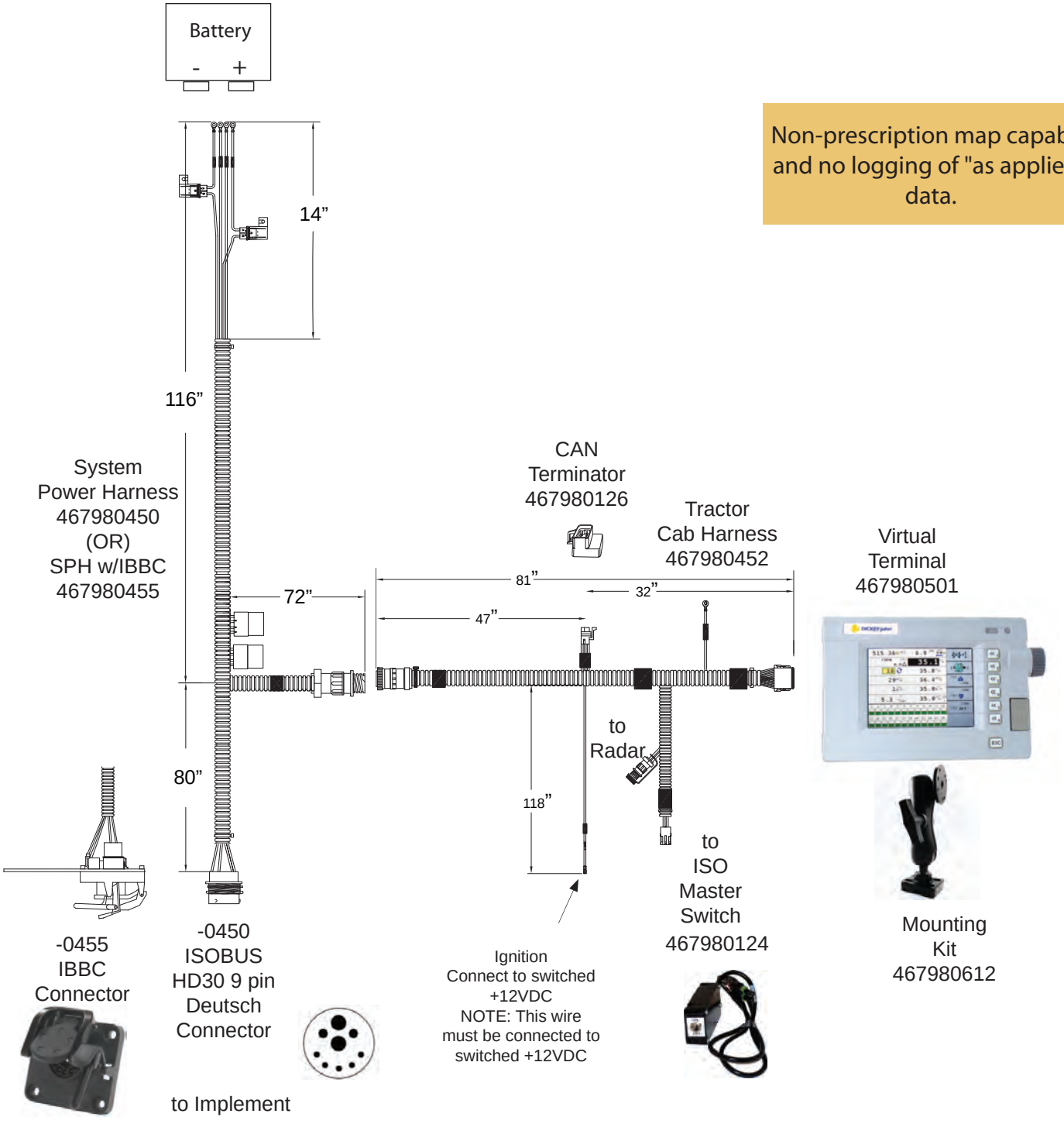
- A 240 pixel x 240 pixel color graphics display
- Rotary knob for scrolling
- Software-defined keys for navigation
- Escape key
- Backlit graphics display for night-time use
- Backlight intensity adjustment
- Error messages with audible alarm
- English or metric measurements
- Data port to support VT reprogramming on selected modules

5" Virtual Terminal Kit	
Part Number	**Description**
IACABKIT5 Kit contains one each of the below components.	
46798-0501	IntelliAg Virtual Terminal Model A2 5 in.
46798-0612	Mounting Kit with Ram 2.43
46798-0124	Master Switch
46798-0126	Mini CAN Terminator
46798-0452	Tractor CAN Harness
46798-0450	System Power Harness
11011-6416	Ty-Wrap Bundle 64-7 in. and 16-14 in.
11001-1439	5 in. Virtual Terminal Manual
Upgrade options:	
46798-0455	System Power Harness with IBBC Connector
46798-0456	System Power Harness with IBBC connector (used on Cat MT Series tractor and replaces 46798-0450 harness)

AI-50 5" Virtual Terminal

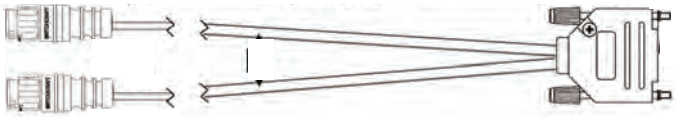
Harness Diagram

Non-prescription map capable and no logging of "as applied" data.



Virtual Terminal

AI-120 Monitor Adapter
466459645



AI-100 Monitor Adapter
466495640

AI-70 Monitor Adapter
466495610

5' Auxiliary Camera Adapter
456495650

10' Video Cable
456495655

20' Video Cable
456495620

40' Video Cable
456495660

50' Video Cable
456495665

Cable Assembly 90˚ Angled Pigtail
456495670

Camera and Accessories

An optional camera can be installed on the rear of the tractor or on the implement and connected to the AI-120, AI-100, and AI-50 terminal. Video displays on the terminal and provides the added benefits of:

- viewing blind spots
- backing up to implement
- view of implement activity while operating
- safety precaution to reduce accidential equipment damage or bodily injury

Features:

- 100% waterproof
- Annodized solid aluminum housing
- Auto infrared night vision
- Heavy-duty mounting magnet
- Made in the USA

Camera and Accessories	
Part Number	**Description**
46649-5600	Camera; 4.3 Lens
46649-5645	AI-120 Monitor Adapter
46649-5640	AI-100 Monitor Adapter
46649-5610	AI-70 Monitor Adapter
46649-5650	Camera Cable Assembly, 5' auxiliary camera adapter
46649-5655	Camera Cable Assembly, 10' shielded video cable
46649-5620	Camera Cable Assembly, 20' shielded video cable
46649-5660	Camera Cable Assembly, 40' shielded video cable
46649-5665	Camera Cable Assembly, 50' shielded video cable
46649-5670	Camera Cable Assembly, 90º angled camera pigtail

IntelliAg®

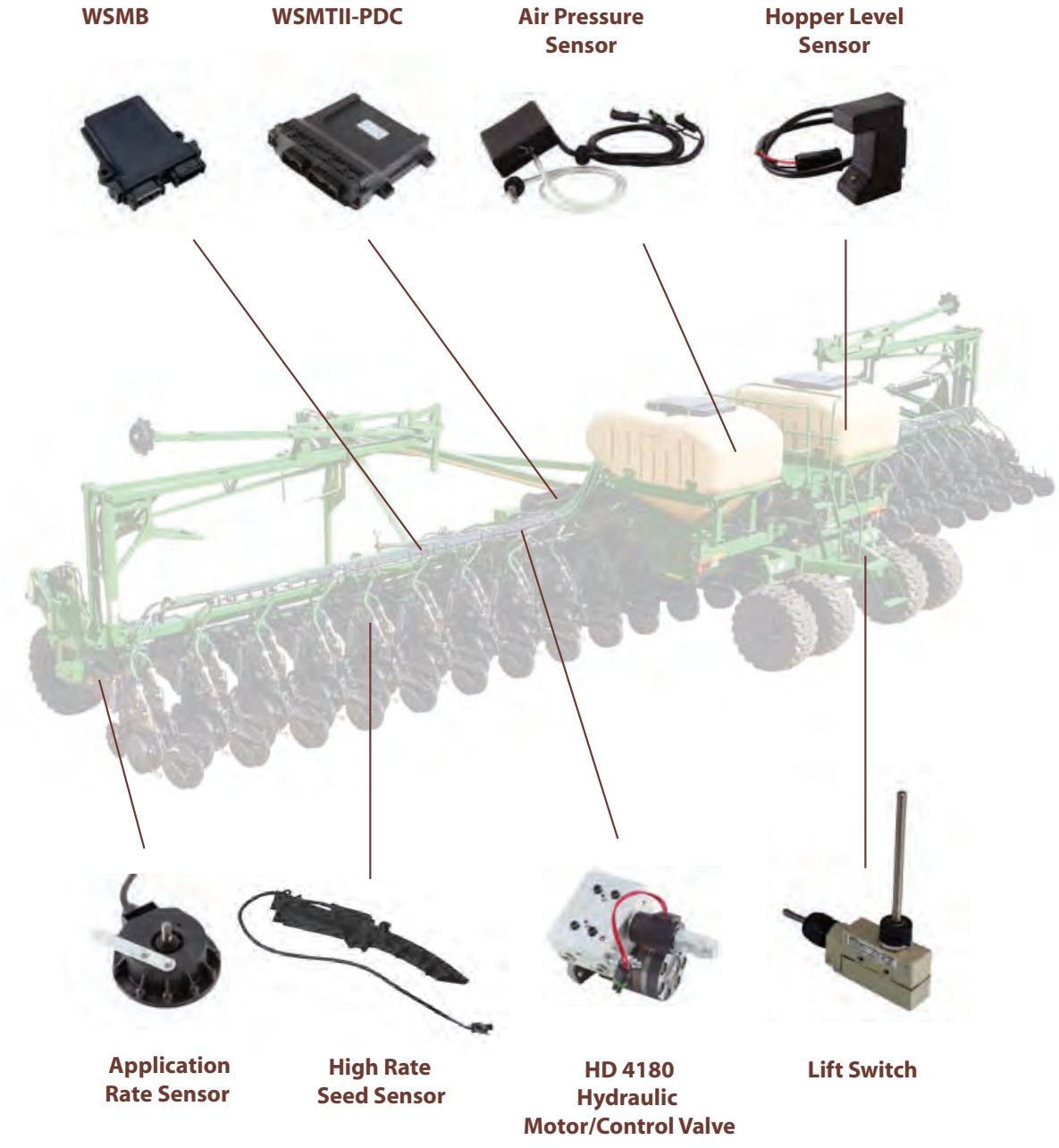
Monitor and Control

Base System - Planter

- IntelliAg Virtual Terminal AI-120 12" color touch screen
- Tractor harness for use virtual terminal
- System power harness with ISO hitch connector
- ISO master switch to control on/off
- Hitch extension harness
- PDC - WSMT2
- WSMT2 T harness
- Control harness for connection to valves and feedback sensors

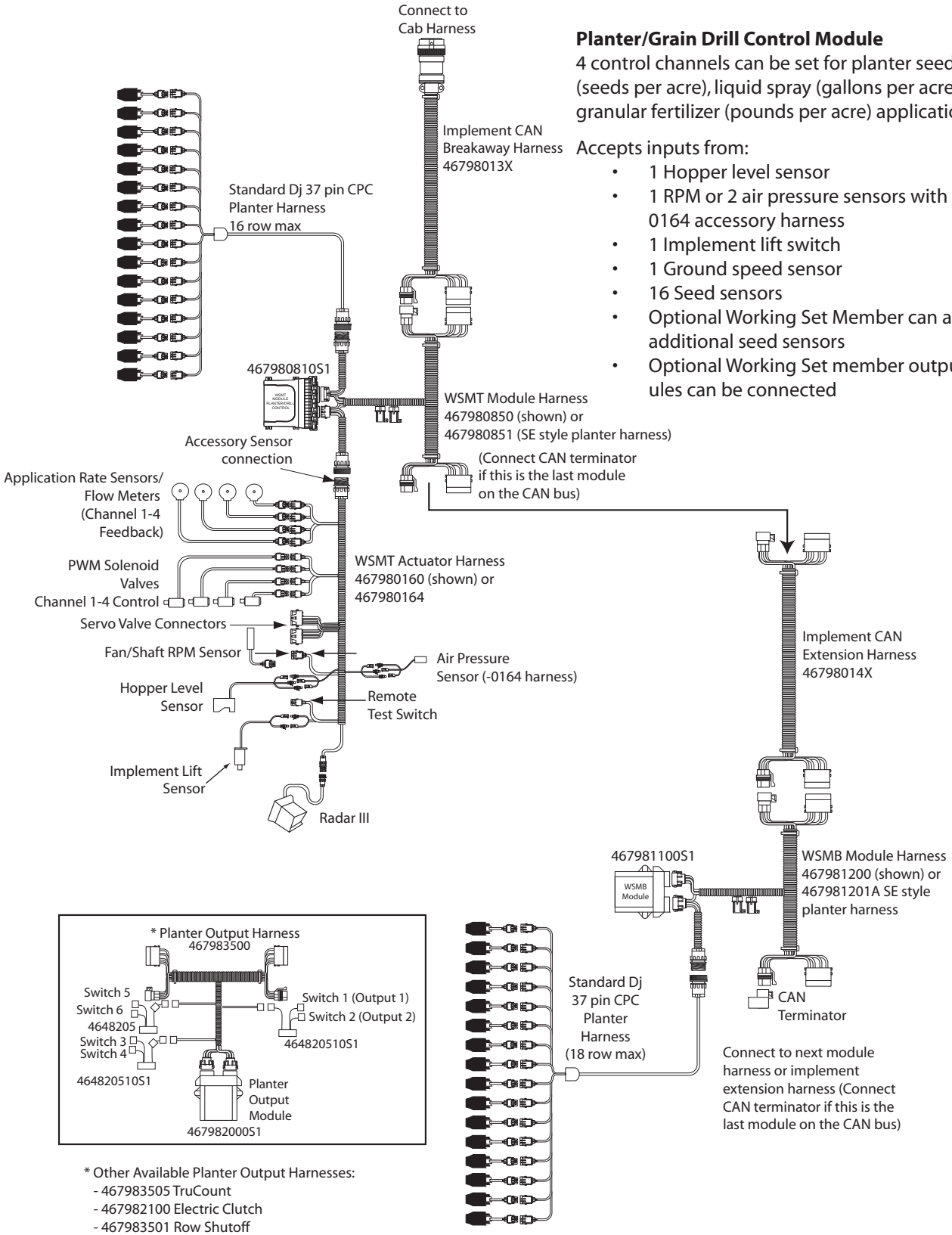
Accessory Module WSMB

An accessory module is required for planters larger than 16 rows. Capable of processing 18 seed sensor inputs for communication to control module.



IntelliAg®

System Diagram



Planter/Grain Drill Control Module
4 control channels can be set for planter seeding (seeds per acre), liquid spray (gallons per acre), or granular fertilizer (pounds per acre) application.

Accepts inputs from:

- 1 Hopper level sensor
- 1 RPM or 2 air pressure sensors with 11001-0164 accessory harness
- 1 Implement lift switch
- 1 Ground speed sensor
- 16 Seed sensors
- Optional Working Set Member can accept additional seed sensors
- Optional Working Set member output modules can be connected

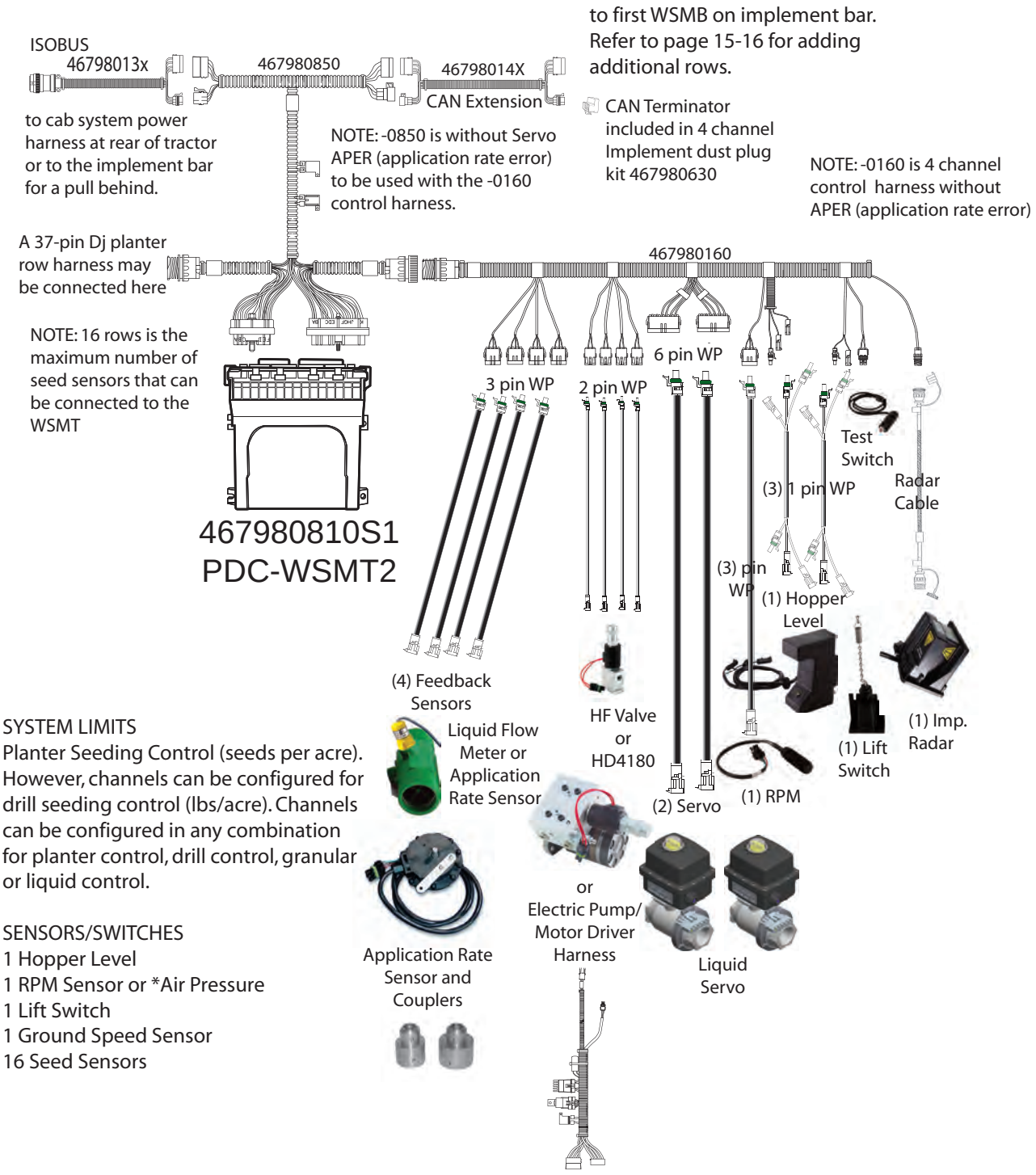
* Other Available Planter Output Harnesses:
- 467983505 TruCount
- 467982100 Electric Clutch
- 467983501 Row Shutoff

Refer to page 21

IntelliAg®

-0850 WSMT Harness without Servo APER

(-0160 4 channel control harness without APER)


ISOBUS
46798013x
467980850
46798014X
CAN Extension
to first WSMB on implement bar. Refer to page 15-16 for adding additional rows.
CAN Terminator included in 4 channel Implement dust plug kit 467980630
to cab system power harness at rear of tractor or to the implement bar for a pull behind.
NOTE: -0850 is without Servo APER (application rate error) to be used with the -0160 control harness.
NOTE: -0160 is 4 channel control harness without APER (application rate error)
A 37-pin Dj planter row harness may be connected here
467980160
NOTE: 16 rows is the maximum number of seed sensors that can be connected to the WSMT
3 pin WP
2 pin WP
6 pin WP
Test Switch
(3) 1 pin WP
Radar Cable
467980810S1
PDC-WSMT2
(3) pin WP
(1) Hopper Level
(4) Feedback Sensors
HF Valve or HD4180
(1) Imp. Radar
(1) Lift Switch
Liquid Flow Meter or Application Rate Sensor
(2) Servo
(1) RPM
or Electric Pump/ Motor Driver Harness
Application Rate Sensor and Couplers
Liquid Servo

SYSTEM LIMITS
Planter Seeding Control (seeds per acre). However, channels can be configured for drill seeding control (lbs/acre). Channels can be configured in any combination for planter control, drill control, granular or liquid control.

SENSORS/SWITCHES
1 Hopper Level
1 RPM Sensor or *Air Pressure
1 Lift Switch
1 Ground Speed Sensor
16 Seed Sensors

* Requires 46798-0164 Control harness, see illustration of control harnessing for a planter/drill using the -0164 Control harness and the -0850 WSMT harness

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System Parts List

Hitch Extensions

Hitch Extension 6'	467980134
Hitch Extension 10'	467980132
Hitch Extension 15'	467980136
Hitch Extension 20'	467980131
Hitch Extension 30'	467980133
Hitch Extension 40'	467980130
Hitch Extension 50'	467980135

WSMT	467980810S1
WSMT Harness	467980850
CAN Extension 5'	467980142
CAN Extension 10'	467980141
CAN Extension 20'	467980140
CAN Extension 25'	467980143
CAN Extension 40'	467980144
CAN Extension 45'	467980146
4 Ch. Imp. Dust Plug Kit w/CAN Term.	467980630
Ty Wrap Bundle 100 14"	110110099
PDC User Manual	110011485
Control Harness	467980160

Hopper Level 1

Hopper Level Sensor	466820720S3
Hopper Level Sensor w/ 1/2" Bushing	466820721S1
3-1Pin WP Ext. Cable 5'	466820713
3-1Pin WP Ext. Cable 10'	466820712S1
3-1Pin WP Ext. Cable 15'	466820714
3-1Pin WP Ext. Cable 20'	466820710S3

RPM Sensor 1

Hall Effect Sensor RPM (Smooth)	463500030S1
Hall Effect Sensor RPM (Threaded)	466970014S1
HES Ext. Cable 3Pin WP 15'	459680922

Application Rate Sensor

Application Rate Sensor 360 1' Cable	464360178S1
AR Sensor 5' Cable	464360176S1
AR Sensor 6' Cable	464360179S1
AR Sensor 10' Cable	464360170S1
AR Sensor 15' Cable	464360171S1
AR Sensor 22' Cable	464360177S1
AR Sensor 30' Cable	464360172S1
App. Rate 1" coupler	457141810
App. Rate 1.25" coupler	457141850
HD4180 to AR Sensor coupler	467092221
3Pin WP Ext. Cable 15'	457901810
3Pin WP Ext. Cable 30'	457901811
3Pin WP Ext. Cable 45'	457901812

Lift Switch and Radar

Implement Lift Switch	463720150S1
Lift Switch - Whisker Type	464820520S1
3-1Pin WP Ext. Cable 5'	466820713
3-1Pin WP Ext. Cable 10'	466820712S1
3-1Pin WP Ext. Cable 15'	466820714
3-1Pin WP Ext. Cable 20'	466820710S3
Radar III w/ 14' Cable & Mtg Brkt	467831000S9
Radar Extension 10'	439400024
Radar Extemsion 15'	439400065
Radar Extension 25'	439400064
Test Switch	464210515S1

Pulse-Width Modulation Controls 1-4

Hydraulic Valve Hydra Force 4 gpm	467092004S1
Hydraulic Valve Hydra Force 8 gpm	467092008S1
Hydraulic Valve Hydra Force 25 gpm	467092050S1
HD4180 w/Integrated Valve	467092200S1
HD4180 Mounting Bracket	467092219
HD4180 Pltr Mtg Brckt & Hardware Kit	467092219S1
12 Ga. 2Pin WP Ext. Cable 15'	467980470
12 Ga. 2Pin WP Ext. Cable 20'	467980471
12 Ga. 2Pin WP Ext. Cable 30'	467980473
12 Ga. 2Pin WP Ext. Cable 40'	467980472

Flow Meters

Flow Meter 1/2"	PM00370018S1
Flow Meter 3/4"	PM00370023S1
Flow Meter 1"	PM00370030S1
Flow Meter 1.5"	PM00370040S1
Flow Meter 2"	PM00370048S1
Flow Meter 3"	PM00370068S1
Flow Meter 4"	PM00370088S1
SS Flow Meter 1/2"	PMNPT70116S1
SS Flow Meter 3/4"	PMNPT70121S1
SS Flow Meter 1"	PMNPT70126S1
SS Flow Meter 1-1/2"	PMNPT70136S1
SS Flow Meter 2"	PMNPT70146S1
3Pin WP Ext. Cable 15'	457901810
3Pin WP Ext. Cable 30'	457901811
3Pin WP Ext. Cable 45'	457901812

Liquid Valve and Actuator (liquid flow control)

Valve & Actuator Assy. 3/8" 2-Way Stainless Steel	467095010
Valve & Actuator Assy. 3/8" 3-Way Stainless Steel	467095220
Valve & Actuator Assy. 1/2" 2-Way Stainless Steel	467095020
Valve & Actuator Assy. 3/4" 2-Way Poly	467095030
Valve & Actuator Assy. 1" 2-Way Poly	467095280
Valve & Actuator Assy. 1" 2-Way Stainless Steel	467095290
Valve & Actuator Assy. 1-1/2" 3-Way Poly	467095050
Valve & Actuator Assy. 1-1/2" 3-Way Stainless Steel	467095140
Valve & Actuator Assy. 2" 2-Way Stainless Steel	467095150
Valve & Actuator Assy. 2" 3-Way Stainless Steel	467095160
Valve & Actuator Assy. 3" 2-Way Stainless Steel	467095170
6Pin WP Extension Cable 15'	457901820
6Pin WP Extension Cable 30'	457901821

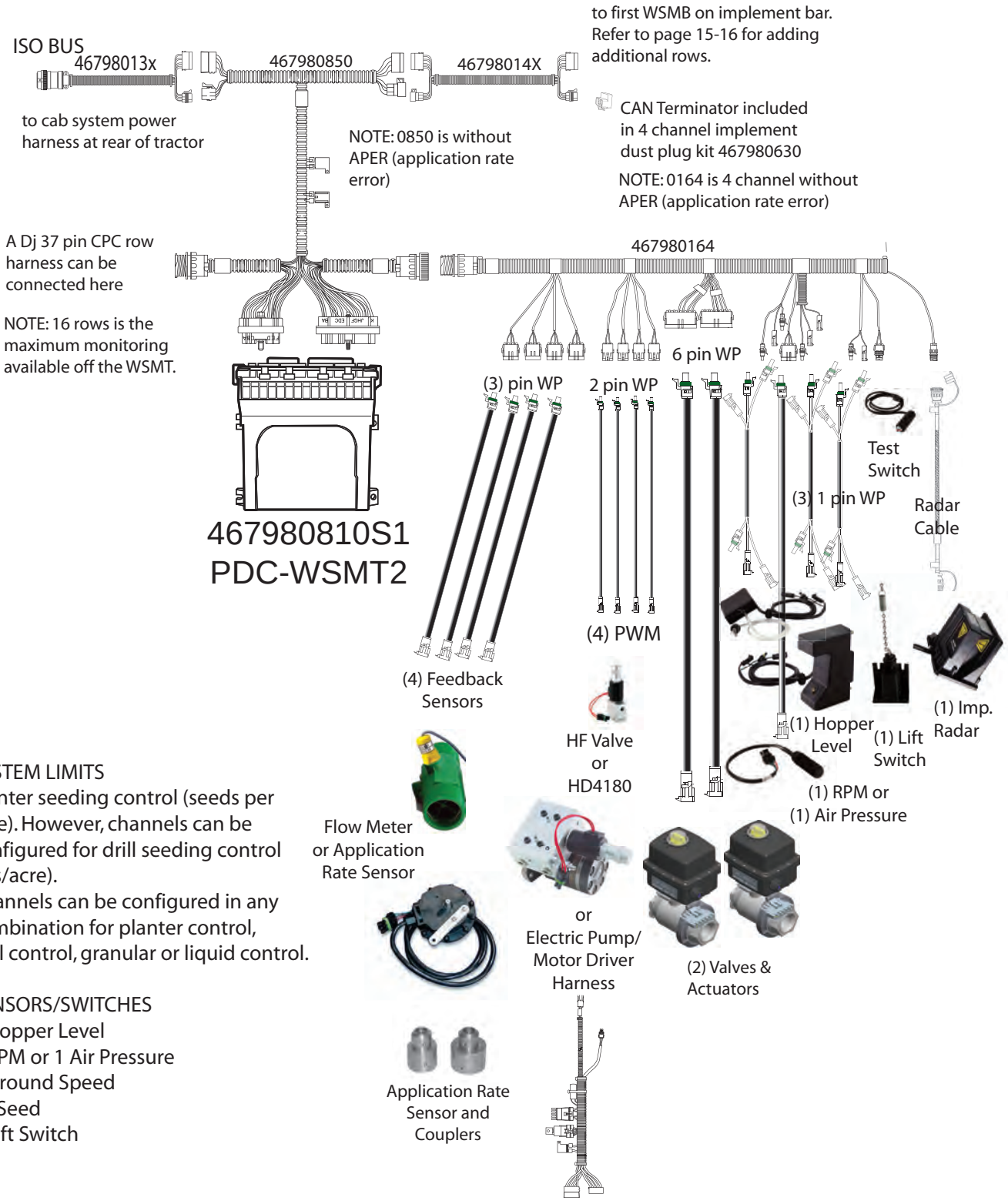
Electric Motor Driver

High Current Electric Motor Harness	467980490
Power Harness (high current < 10 Amps)	467980390

Control Harnessing

-0850 WSMT Harness without APER

(-0164 4 channel control harness without APER)


ISO BUS
46798013x
467980850
46798014X
to first WSMB on implement bar. Refer to page 15-16 for adding additional rows.
to cab system power harness at rear of tractor
NOTE: 0850 is without APER (application rate error)
CAN Terminator included in 4 channel implement dust plug kit 467980630
NOTE: 0164 is 4 channel without APER (application rate error)
A Dj 37 pin CPC row harness can be connected here
NOTE: 16 rows is the maximum monitoring available off the WSMT.
467980164
6 pin WP
(3) pin WP
2 pin WP
Test Switch
(3) 1 pin WP
Radar Cable
467980810S1
PDC-WSMT2
(4) PWM
(4) Feedback Sensors
HF Valve or HD4180
(1) Imp. Radar
(1) Hopper Level
(1) Lift Switch
(1) RPM or (1) Air Pressure
Flow Meter or Application Rate Sensor
or Electric Pump/ Motor Driver Harness
(2) Valves & Actuators
Application Rate Sensor and Couplers

SYSTEM LIMITS

Planter seeding control (seeds per acre). However, channels can be configured for drill seeding control (lbs/acre).

Channels can be configured in any combination for planter control, drill control, granular or liquid control.

SENSORS/SWITCHES

1 Hopper Level
1 RPM or 1 Air Pressure
1 Ground Speed
16 Seed
1 Lift Switch

IntelliAg®

System Parts List

Hitch Extensions

Hitch Extension 6’	467980134
Hitch Extension 10‘	467980132
Hitch Extension 15’	467980136
Hitch Extension 20‘	467980131
Hitch Extension 30’	467980133
Hitch Extension 40‘	467980130
Hitch Extension 50’	467980135

WSMT	467980810S1
WSMT Harness	467980850
CAN Extension 5‘	467980142
CAN Extension 10’	467980141
CAN Extension 20’	467980140
CAN Extension 25‘	467980143
CAN Extension 40’	467980144
CAN Extension 45‘	467980146
4 Ch. Imp. Dust Plug Kit w/CAN Term.	467980630
Ty Wrap Bundle 100 14”	110110099
PDC User Manual	110011485
Control Harness	467980164

Hopper Level 1

Hopper Level Sensor	466820720S3
Hopper Level Sensor w/ 1/2“ Bushing	466820721S1
3-1Pin WP Ext. Cable 5’	466820713
3-1Pin WP Ext. Cable 10‘	466820712S1
3-1Pin WP Ext. Cable 15’	466820714
3-1Pin WP Ext. Cable 20‘	466820710S3

RPM Sensor 1

Hall Effect Sensor RPM (Smooth)	463500030S1
Hall Effect Sensor RPM (Threaded)	466970014S1
HES Ext. Cable 3Pin WP 15’	459680922

Application Rate Sensor

Application Rate Sensor 360 1’ Cable	464360178S1
AR Sensor 5‘ Cable	464360176S1
AR Sensor 6’ Cable	464360179S1
AR Sensor 10‘ Cable	464360170S1
AR Sensor 15’ Cable	464360171S1
AR Sensor 22‘ Cable	464360177S1
AR Sensor 30’ Cable	464360172S1
App. Rate 1” coupler	457141810
App. Rate 1.25” coupler	457141850
HD4180 to AR Sensor coupler	467092221
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Lift Switch and Radar

Implement Lift Switch	463720150S1
Lift Switch - Whisker Type	464820520S1
3-1Pin WP Ext. Cable 5’	466820713
3-1Pin WP Ext. Cable 10‘	466820712S1
3-1Pin WP Ext. Cable 15’	466820714
3-1Pin WP Ext. Cable 20‘	466820710S3
Radar III w/ 14‘ Cable & Mtg Brkt	467831000S9
Radar Extension 10’	439400024
Radar Extension 25‘	439400064
Test Switch	464210515S1

Air Pressure 1-4

Air Pressure Sensor	466820920S1
Air Pressure Sensor w/ 1/2” Bushing	466820922S1
3-1Pin WP Ext. Cable 5’	466820713
3-1Pin WP Ext. Cable 10‘	466820712S1
3-1Pin WP Ext. Cable 15’	466820714
3-1Pin WP Ext. Cable 20‘	466820710S3

Pulse-Width Modulation Controls 1-4

Hydraulic Valve Hydra Force 4 gpm	467092004S1
Hydraulic Valve Hydra Force 8 gpm	467092008S1
Hydraulic Valve Hydar Force 25 gpm	467092050S1
HD4180 w/Integrated Valve	467092200S1
HD4180 Mounting Bracket	467092219
HD4180 Pltr Mtg Brckt & Hardware Kit	467092219S1
12 Ga. 2Pin WP Ext. Cable 15’	467980470
12 Ga. 2Pin WP Ext. Cable 20’	467980471
12 Ga. 2Pin WP Ext. Cable 30’	467980473
12 Ga. 2Pin WP Ext. Cable 40’	467980472

Flow Meters

Flow Meter 1/2”	PM00370018S1
Flow Meter 3/4”	PM00370023S1
Flow Meter 1“	PM00370030S1
Flow Meter 1.5”	PM00370040S1
Flow Meter 2“	PM00370048S1
Flow Meter 3”	PM00370068S1
Flow Meter 4“	PM00370088S1
SS Flow Meter 1/2”	PMNPT70116S1
SS Flow Meter 3/4”	PMNPT70121S1
SS Flow Meter 1”	PMNPT70126S1
SS Flow Meter 1-1/2”	PMNPT70136S1
SS Flow Meter 2”	PMNPT70146S1
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Liquid Valve and Actuator (liquid flow control)

Valve & Actuator Assy. 3/8” 2-Way Stainless Steel	467095010
Valve & Actuator Assy. 3/8” 3-Way Stainless Steel	467095220
Valve & Actuator Assy. 1/2” 2-Way Stainless Steel	467095020
Valve & Actuator Assy. 3/4” 2-Way Poly	467095030
Valve & Actuator Assy. 1” 2-Way Poly	467095280
Valve & Actuator Assy. 1” 2-Way Stainless Steel	467095290
Valve & Actuator Assy. 1-1/2” 3-Way Poly	467095050
Valve & Actuator Assy. 1-1/2” 3-Way Stainless Steel	467095140
Valve & Actuator Assy. 2” 2-Way Stainless Steel	467095150
Valve & Actuator Assy. 2” 3-Way Stainless Steel	467095160
Valve & Actuator Assy. 3” 2-Way Stainless Steel	467095170
6Pin WP Extension Cable 15’	457901820
6Pin WP Extension Cable 30’	457901821

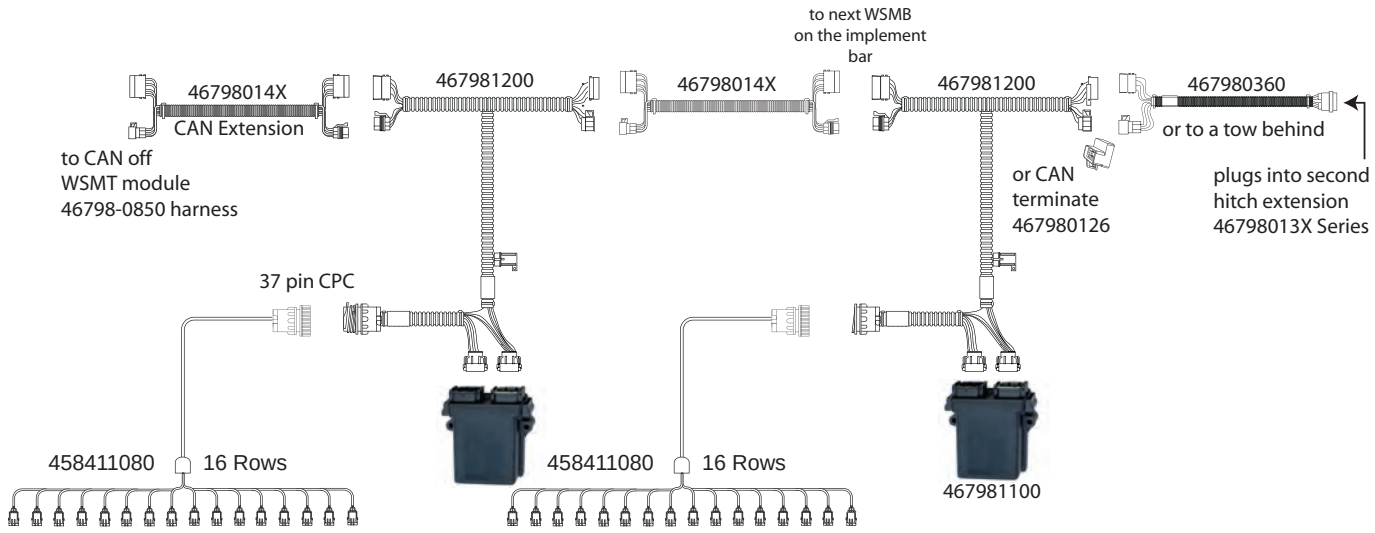
Electric Motor Driver

High Current Electric Motor Harness	467980490
Power Harness (high current < 10 Amps)	467980390

Add Additional Rows

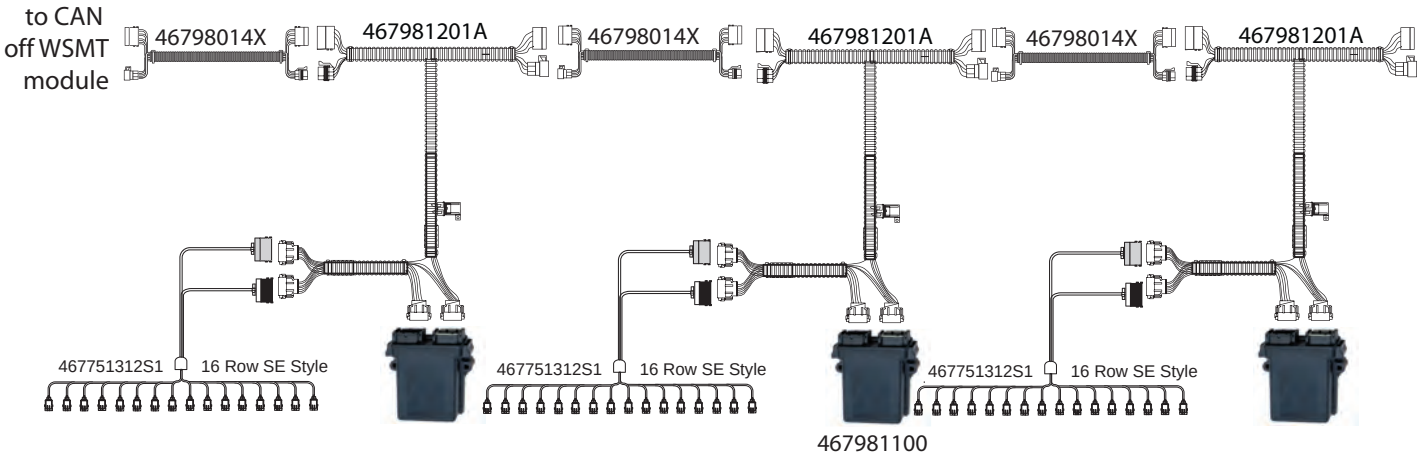
Row Harnesses

37 pin CPC WSMB Harness



SYSTEM LIMITS
18 Seed Rows per WSMB
12 WSMB modules per ACC WSMT
10 WSMB modules per PDC WSMT

SE Style WSMB Harness



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System Parts List

Hitch Extensions

Hitch Extension 6’	467980134
Hitch Extension 10‘	467980132
Hitch Extension 15’	467980136
Hitch Extension 20‘	467980131
Hitch Extension 30’	467980133
Hitch Extension 40‘	467980130
Hitch Extension 50’	467980135
WSMB	467981100S1
WSMB Harness	467981201
CAN Extension 5‘	467980142
CAN Extension 10’	467980141
CAN Extension 20’	467980140
CAN Extension 25‘	467980143
CAN Extension 40’	467980144
CAN Extension 45’	467980146
CAN Terminator	467980126

CAN to Hitch Connector Harness

This harness accommodates disconnection of a tow behind.

Rear Implement Hitch Harness 3‘	467980360
Rear Implement Hitch Harness IBBC 6’	467980361
Rear Implement Hitch Harness IBBC 20’	467980362
Rear Implement Hitch Harness IBBC 25‘	467980363

Row Harness (37 pin CPC)

4 Row Planter Harness	458410530
6 Row Planter Harness	458410550
8 Row Planter Harness	458410570
12 Row Planter Harness	458410590
16 Row Planter Harness (in diagram)	458411080
12 Row Y Cable to use 2-6 Row Pltr Hrn	459680960
16 Row Y Cable to use 2-8 Row Pltr Hrn	459680950
16 Row 2-8 Row Pltr Hrn w/16 Row Y	458410600
24 Row Y Cable to use 2-12 Row Hrn	459680940
JD 32 Row Reverse Y Harness	467980445
32 Row Reverse Y Harness	467980446

CASE IH

12 Row Horz. Fold	458410860
REQUIRES 30’ Extensions	459680321
16 Row Horz. Fold	458410610
REQUIRES 30’ Extensions	459680321

KINZE

8 Row Econo Fold	458410570
REQUIRES 6’ Extension (16 row)	458410810
12 Row Econo Fold	458410610
REQUIRES 30’ Extension	458410810

STACKER BAR

2 Row Tri-Cable	458410980
12 Row Tri-Cable	458411010

Row Harness Extensions

6 Ft. Extension (16 row)	458410810
15 Ft. Extension (16 row)	459680320
30 Ft. Extension (16 row)	459680321
15 Ft. Extension (32 row)	458410820
30 Ft. Extension (32 row)	458410790

Row Harness (SE Style)

Used In This Example:

18 Row SE style Air Cart	467980280

Other SE style Harnesses

12 Row 7.5”	467751300S1
12 Row 15”	467751301S1
12 Row 30”	467751302S1
16 Row 7.5”	467751310S1
16 Row 15”	467751311S1
16 Row 30”	467751312S1
12 Row Air Cart	467751320S1
16 Row Air Cart	467751330S1
18 Row Air Cart	467980280

Seed Sensor Extensions

3’ Sensor Extension 3Pin WP	459680920
4’ Sensor Extension 3Pin WP	459680923S1
6’ Sensor Extension 3Pin WP	459680921
15’ Sensor Extension 3Pin WP	459680922

Seed and Blockage Sensors

Small Tube A25925	151350008
Small Grain CT w/Hi Rate (Vacuum)	452440881A
Small Grain Curved Tube w/Hi Rate	452440971
Monosem Chute w/Hi Rate NG	452440980
AGCO White 6100 Hi-Rate	452441010S3
Nodet Sensor Only	453520350S1
Nodet Chute & Sensor	453520360S1
Nodet Planter II	453520370S1
Monosem PBC PNU	454650271
Monosem NG	454650330S1
Case ASM Hi-Rate	454910750S1
Small Tube Vacumm Planter	461530420S1
Cyclo Air 400/500/800/900	461642230S3
Landoll	461700030S1
AGCO White 5100 & 7500	467120030S3
Buffalo Plateless Planter	461800060
Hi-Rate Grain Drill	465260010S1
Jeantill	465790010S3
Recon Material Flow	467420010S1
Recon Flow with 2’ Harness	467420100S1
Vigilense 25 mm	467420701S1
Vigilense 25 mm with SS Insert	467420702S1
Vigilense 32 mm	467420711S1
Vigilense 32 mm with SS Insert	467420712S1
Vigilense 32 mm with SS Outlet	467420730S1
Vigilense 45 mm	467420720S1
Vigilense 45 mm with SS Insert	467420721S1
Monosem Mecca 2000	467700090S1
Monosem MS Vegetable	467700100S1
Stanhay Dart II	467700220S1
Case ASM Hi-Rate Sensor Only	467760010S1

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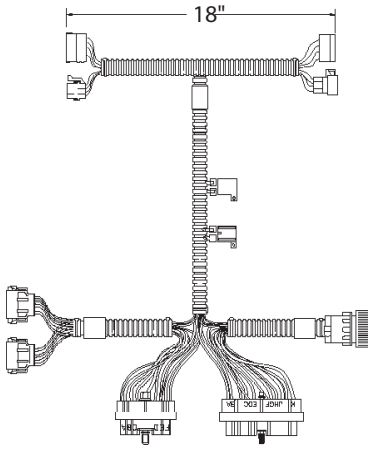
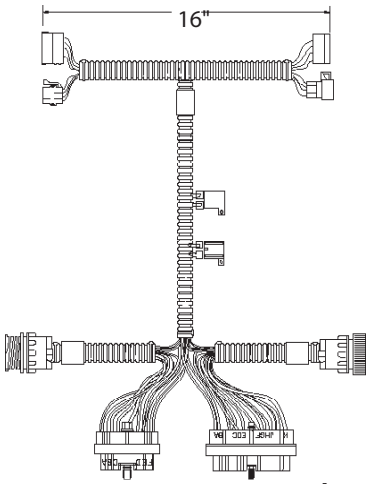
WSMT2



WSMT Harness 46798-0851



WSMT Harness 46798-0850 and -0852

Cab to Implement Harness Hitch Extension 46798013X

Working Set Master Module

The Working Set Master Module (WSMT2) houses the system's primary interface device. All system parameters, constants, and memory are stored in the WSMT and controls the application of material by interfacing with proportional hydraulic valves and feedback sensors. Several WSMT modules are available for a variety of applications.

Working Set Master Module	
Part Number	**Description**
46798-0810S1	Module, PDC-WSMT2 (Planter/Drill Control)
46798-0630	4 Channel Implement Dust Plug Kit with Terminators
11011-0099	Ty Wrap Bundle 100 14 in.

Working Set Master Harness

WSMT Harnessing	
Part Number	**Description**
46798-0850	WSMT Harness 37-pin CPC without APER (PDC)
46798-0851	WSMT Harness Seed Manager SE style without APER (PDC)
46798-0852	WSMT Harness 37-pin CPC with APER (Material Application)

NOTES:
SE style harnesses have 1 gray and 1 black 12-pin Deutsch DT connector

Cab to WSMT Harness Hitch Extension

Tractor Cab to Implement Harness Hitch Extensions	
Part Number	**Description**
46798-0134	6 ft. Hitch Extension ISO system CAN
46798-0132	10 ft. Hitch Extension ISO system CAN
46798-0136	15 ft. Hitch Extension ISO system CAN
46798-0131	20 ft. Hitch Extension ISO system CAN
46798-0133	30 ft. Hitch Extension ISO system CAN
46798-0130	40 ft. Hitch Extension ISO system CAN
46798-0135	50 ft. Hitch Extension
46798-0457	40 ft. Hitch to Hitch Extension

Implement Kit

IAPDCIMPKIT Planter/Drill Control Implement Kit consists of the following	
Part Number	**Description**
46798-0810S1	Module, PDC-WSMT2 (Planter/Drill Control)
46798-0850	WSMT Harness 37-pin CPC without APER (PDC)
46798-0160	Control Harness
46798-0630	4 Channel Implement Dust Plug Kit with Terminators
11001-1509A	Operator's Manual User Level 2
11001-1510	Operator's Manual User Level 1

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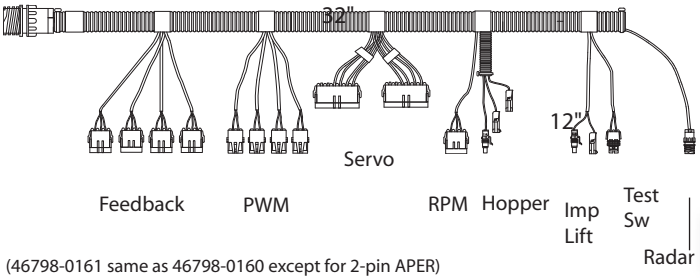
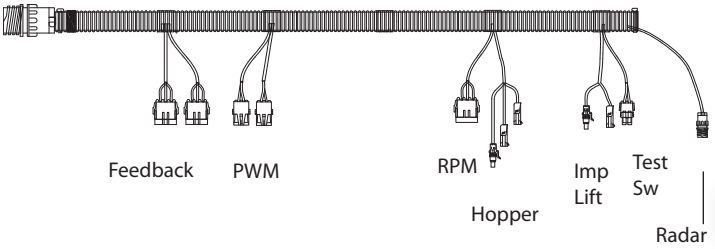
WSMT2 Harnesses (Control Channel/Accessory Inputs)

37 pin CPC Control Harnesses	
Part Number	**Description**
46798-0160	WSMT Planter Drill Control 4 Ch Actuator Harness without APER (app error rate)
46798-0161	WSMT Material Application 4 Ch Actuator Harness with APER (app error rate)
46798-0162	WSMT Planter Drill Control 2 Ch Actuator/Sensor Harness
46798-0164	WSMT 4 Ch Actuator Harness with RPM or Air Pressure
46798-0165	Monitor Only Harness

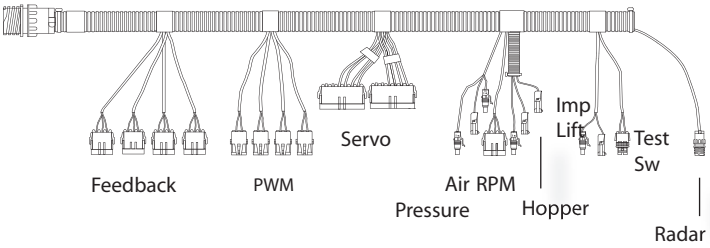


(46798-0161 same as 46798-0160 except for 2-pin APER)

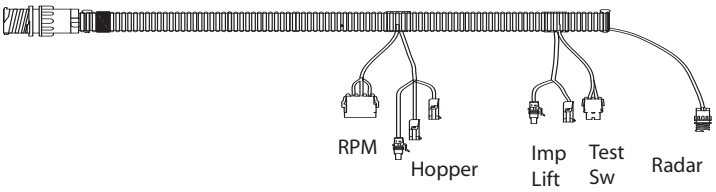
Harness PDC 46798-0160



Harness PDC 46798-0162



Pressure Harness with RPM/Air Pressure
46798-0164



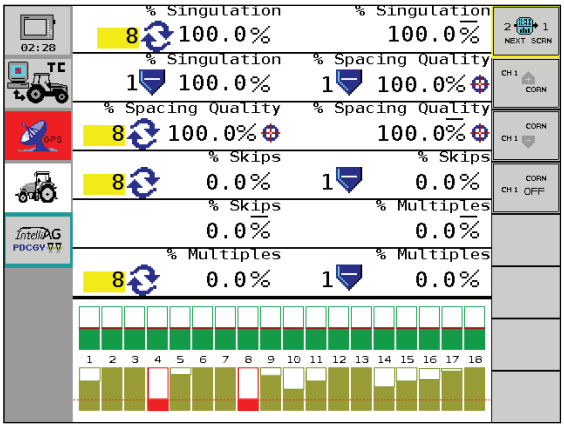
Monitor Only Harness (PDC)
46798-0165

IntelliAg®

WSMB

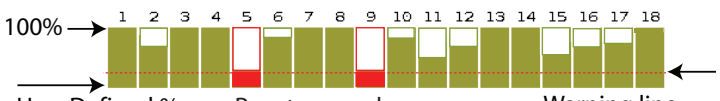
WSMB2

Seed Singulation



IntelliAg Work Screen displaying Seed Singulation %, Spacing Quality, Skips, and Multiples

Bargraph range calculation:
100 - value = bottom bargraph value



User Defined % (bottom of bar graph) *(Example: 90%)*

Row turns red at warning line (75% of defined range) *(Example: ≤92.5%)*

Warning line (75% of bargraph range) *(Example: 92.5%)*

Row Monitoring/Seed Singulation

Working Set Member Module (WSMB)

The Working Set Member Module (WSMB) is an auxiliary to the Working Set Master Module (WSMT). Each WSMB can accept up to 18 rows of seed sensors and passes information direct to the WSMT. Up to 10 WSMB's can be installed to monitor up to 196 rows. The flexible design allows for installation virtually any where on the implement.

Working Set Member Module 2 (WSMB2)

Seed singulation and spacing quality are features available when adding a Working Set Member 2 (WSMB2) module to the IntelliAg system that displays how seeds are planted within each seed row.

Singulation displays a percentage of seeds counted versus seeds expected. Spacing quality reflects how much spacing is occurring between each seed while planting and provides a comparison of row-to-row meter performance.

Working Set Member Module (WSMB)	
Part Number	**Description**
46798-1100S1	WSMB Module (18 seed rows)
46798-8320S1	WSMB2 Module (Seed Singulation and Spacing Quality)

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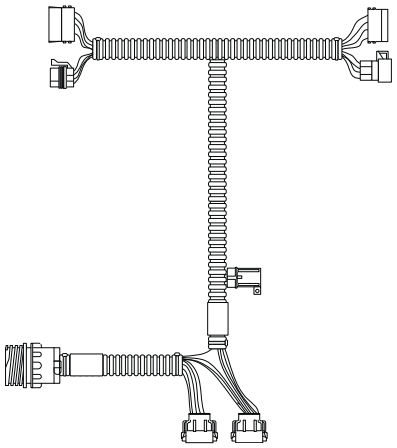
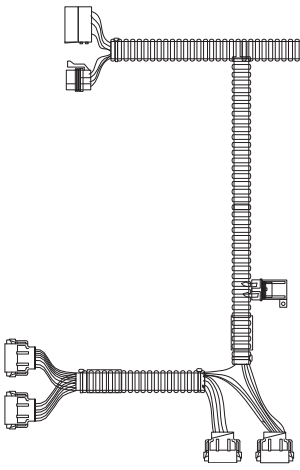
WSMB Harnessing

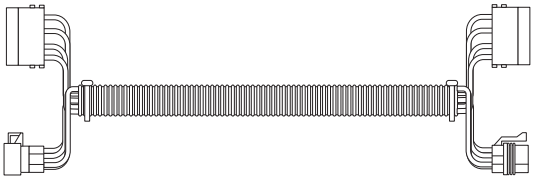


46798-1200 WSMB Harness
Connects to 37 pin CPC Row Planter Harness



Connects to Seed Manager SE planter row harness for seed sensor inputs or Accessory harness for hopper and air pressure inputs.

46798-1201A WSMB Harness SE Style
WSMB Harness SE style row connection has 1 gray and 1 black, 12 pin Deutsch DT connector



46798-014X WSMB Extension Harness

WSMB Harness

WSMB Harnesses	
Part Number	**Description**
46798-1200	WSMB Harness to 37-pin CPC Planter Row Harness (connects to 46798-1100S1)
46798-1201A	WSMB Harness ACC T Harness (connects to 46798-1105S1)

WSMB CAN Extension Harness

WSMB Harnesses	
Part Number	**Description**
46798-0142	WSMB Extension 5 ft.
46798-0141	WSMB Extension 10 ft.
46798-0140	WSMB Extension 20 ft.
46798-0143	WSMB Extension 25 ft.
46798-0144	WSMB Extension 40 ft.
46798-0146	WSMB Extension 45 ft.

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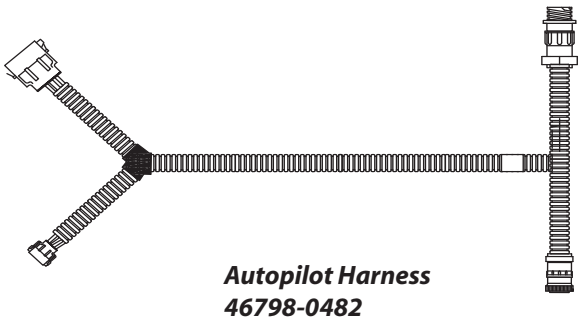
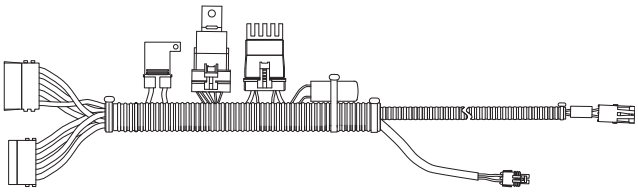
Rear Implement Hitch Harness
46798-0360, 0361, 0362, 0363

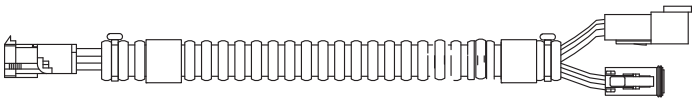


Autopilot Harness
46798-0482

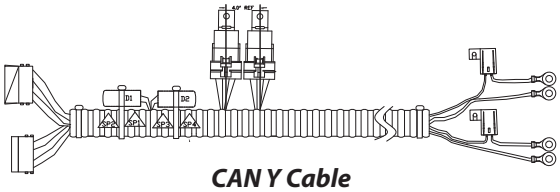


Electric Motor Driver
46798-0490

Case Tractor Cab Harness
46798-0330



CFM to JD GS2 Cab Harness
46798-0335



CAN Y Cable
46798-0390

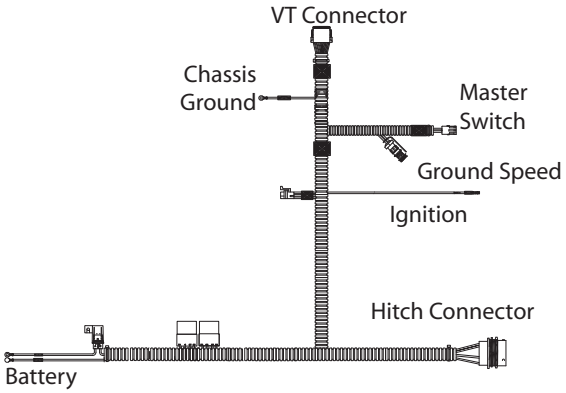
CAN to Hitch Connector Harnesses

Harness accommodates disconnection between implement and tow-behind aircart to second hitch extension.

Rear Implement Hitch Harness	
Part Number	**Description**
46798-0360	Rear Implement Hitch Harness with Deutsch 9-pin (CAN to Hitch) 3 ft.
46798-0361	Rear Implement Hitch Harness with IBBC 9-pin (CAN to Hitch) 6 ft.
46798-0362	Rear Implement Hitch Harness with IBBC 9 pin 20 ft.
46798-0363	Rear Implement Hitch Harness with IBBC 9 pin 25 ft.

Adapter Harnesses

Adapter Harness	
Part Number	**Description**
46798-0482	Autopilot Interface Harness to IntelliAg
46798-0490	Electric Motor Driver (solenoid relay cable for high current electric motor drive)
46798-0330	Case Tractor Cab Harness to Dj Boom Switch Module (CAN to CAN Extension)
46798-0335	CFM to JD GS2 Cab Harness
46798-0128	European ISO Tractor Harness (short) without IBBC connector
46798-0390	CAN Y Cable (used with 46798-0490)



European ISO Tractor Harness
46798-0128

WSMB Output Module

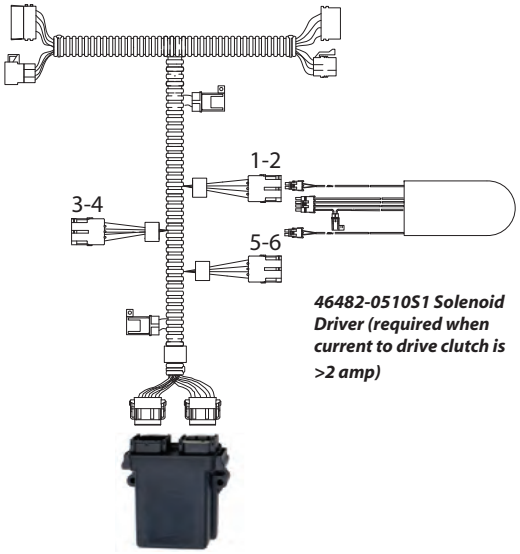
Implement

A WSMB Output Module communicates with the Row and Boom Switch Module for section on/off control.

Row Shutoff Parts	
Part Number	**Description**
46798-2000S1	Output Shutoff Module
46798-3501	Row Shutoff Planter Output Module Harness (disengage)
46798-3504	Planter Output Module Harness for Electric Clutches (engage)
46798-3505	Tru Count Clutch Module Harness
46798-3508	Planter POM Harness
46798-3100	Liquid Boom Shutoff Harness (6 Boom/3 Wire Shutoff)
46798-3101	Liquid Boom Shutoff Harness (6 Boom/2 Wire Shutoff) (used with non-DICKEY-john Valves and 464820510)
46798-2100	Row Shutoff (RSO) Harness (12 solenoid)
46482-0510S1	Solenoid Driver (plugs into 46798-3501 and -3101 for current >2 Amp)

Planter POM Generic Harness

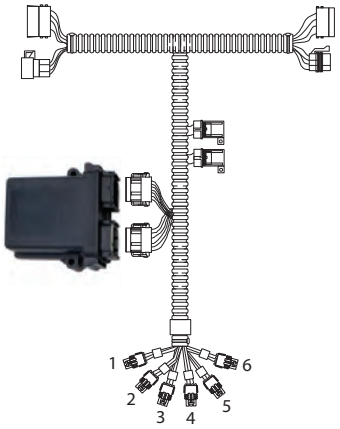
Switch
On = 12 V
Off = 0 V



46482-0510S1 Solenoid Driver (required when current to drive clutch is >2 amp)

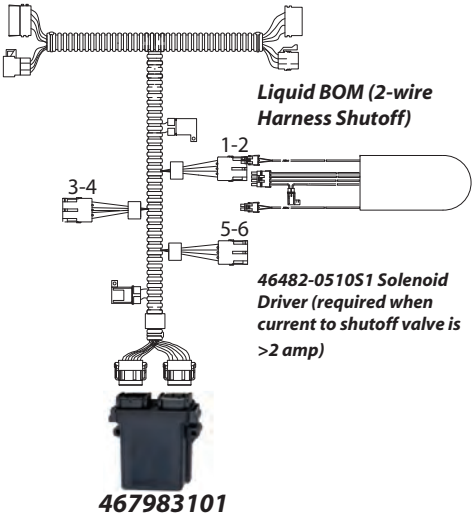
467983501

Liquid BOM Harness (3-wire Shutoff)



467983100

Output Shutoff Module



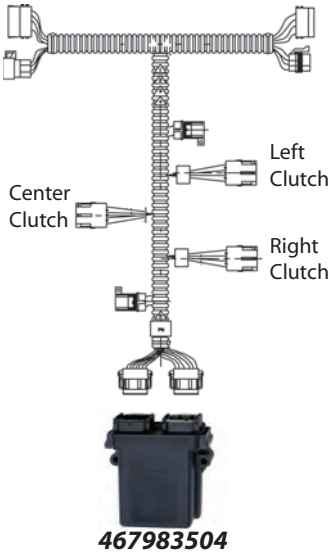
Liquid BOM (2-wire Harness Shutoff)

46482-0510S1 Solenoid Driver (required when current to shutoff valve is >2 amp)

467983101

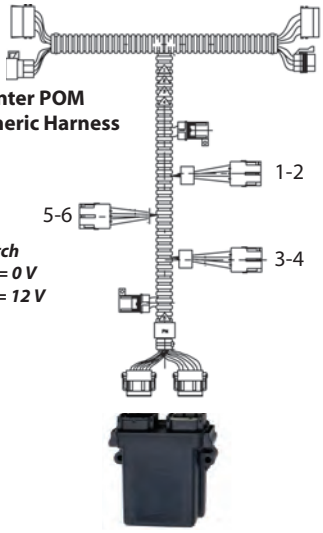
6 Solenoid YP24 Great Plains Output Clutch Harness

Switch
On = 12 V
Off = 0 V



467983504

Planter POM Generic Harness

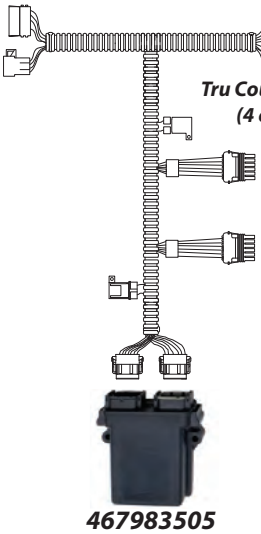


Switch
On = 0 V
Off = 12 V

467983508

Tru Count Solenoid Module (4 clutches per module)

Switch
On = 0 V
Off = 12 V



467983505

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System Parts List

CAN Extension Harnesses

CAN Extension 5‘	467980142
CAN Extension 10’	467980141
CAN Extension 20’	467980140
CAN Extension 25‘	467980143
CAN Extension 40’	467980144
CAN Extension 45‘	467980146
CAN Terminator	467980126

Row Shut Off Harnesses

Planter Output Module Harness	467983501
Tru Count Clutch w/8 Output	467983505

Output Module

Working Set Member Module (WSMB)	467982000S1

Required Drivers

Solenoid Driver	46482010S1

Weather Pak Extensions

12 Ga. 2Pin WP Ext. Cable 15’	467980470
12 Ga. 2Pin WP Ext. Cable 20’	467980471
12 Ga. 2Pin WP Ext. Cable 30’	467980473
12 Ga. 2Pin WP Ext. Cable 40’	467980472
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812
6Pin WP Ext. Cable 15‘	457901820
6Pin WP Ext. Cable 30’	457901821

Row Shut Off Modules

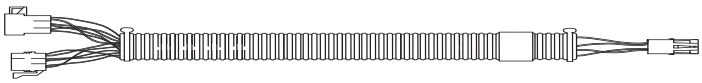
Module with Master & 1-6 Row/Section switches	467984030S1
Extender Module (this part includes face labels for Row/Section 7-12 Row/Section 13/18 Row/Section 19-24	467984040S1

IntelliAg®

Boom Switch Module
46798403OS1

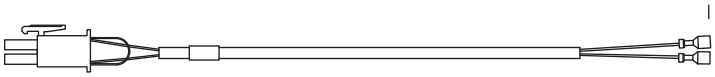
Extended Shutoff Module
46798404OS1

Planter Row Switch Module
467984264S1

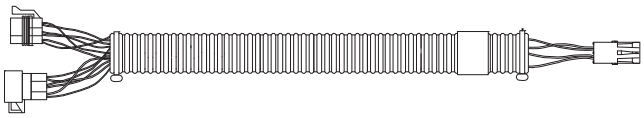


BSM Harness 24"
467980330

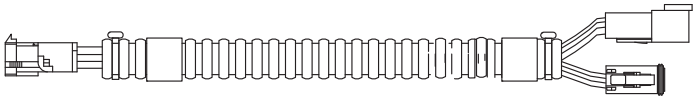
BSM CAN Harness Extension 60"
467980340



ESM Foot Switch Cable 96"
467984180



Case Tractor Cab Harness
467980330



CFM to JD GS2 Cab Harness
467980335

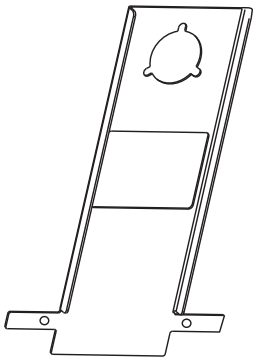
Boom Switch Module

Boom Switch Module with (3) extended modules controls up to 24 boom on/off shutoff valves.

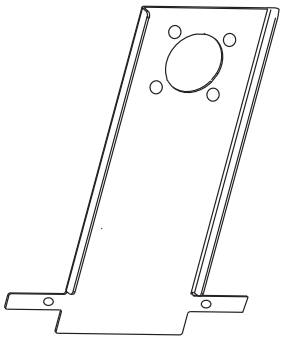
Row Switch Module with (3) extended modules controls up to 24 row shutoff clutches.

Switch modules placed in the cab allow each row/section to be controlled or use the master switch for all row/section on or off.

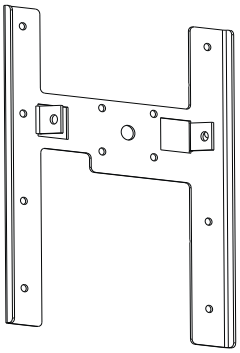
Boom Switch Module Parts	
Part Number	**Description**
46798-4030S1	Boom Switch Module (BSM) (1-6 row)
46798-4040S1	Extended Shut Off Module (ESM) (7-24 row)
46798-4264S1	Planter Row Switch Module
46798-4150	BSM/ESM Mounting Bracket (mounts 4 total) for use with 5" Virtual Terminal (AI-50)
46798-4160	BSM/ESM U-Mount Bracket (accommodates mounting 46798-4030S1 Boom Switch Module)
46798-0330	BSM Harness to Tractor Harness
46798-0340	BSM Harness 60" CAN Extension
46798-4180S1	ESM Foot Switch Cable (Liquid)
46798-0625	BSM/ESM Mounting Bracket for use with 10" Virtual Terminal (AI-100)
46798-0626	BSM/ESM Mounting Bracket for use with 12" Virtual Terminal (AI-120)



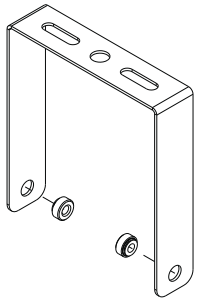
BSM/ESM Mounting Bracket
(AI-120) 467980626



BSM/ESM Mounting Bracket
(AI-100) 467980625



BSM/ESM Mounting Bracket
467984150



BSM U Mount Bracket
467984160

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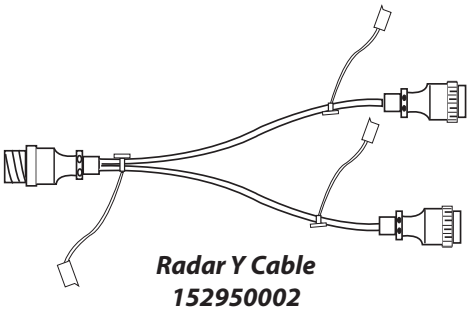
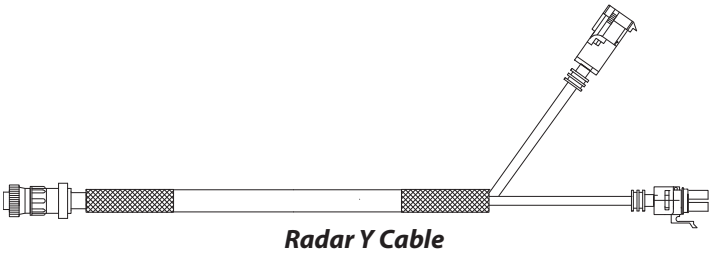
Radar Y Harnesses



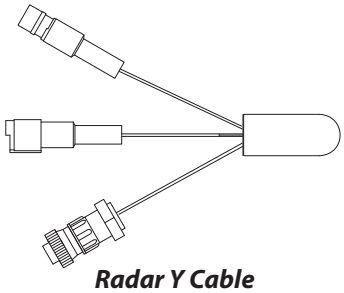
Radar Y Cable
152950002

Adapter Harness	
Part Number	**Description**
15295-0002	Radar Y Cable Generic
45640-4670	Radar Y Cable for Case Maxum 5110-5240, MX90-170 Series, Steiger 9110-9390, 9210-9390 Series, Case STX 275-450 Series
45640-3030	Radar Y Cable for Caterpillar 65A, 65B, 75B Series
45640-4360S1	Radar Y Cable for 35, 45, 55, C, D, E Series
45640-2520S3	Radar Y Cable for John Deere 4xxx, 7xxx, 80xx Series
45640-2530S3	Radar Y Cable for John Deere 7600-8010T
45640-4810	Radar Y Cable for John Deere 8300 and 9400 Series

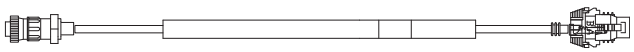


Radar Y Cable
456504670

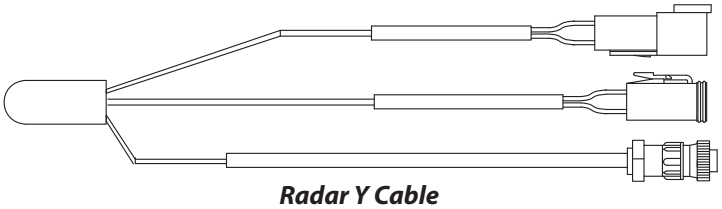
Radar Y Cable
45640530S3



Radar Y Cable
456403030



Radar Y Cable
456404810



Radar Y Cable
45640360S1

Radar Y Cable
45640520S3

IntelliAg®

Monitor and Control

Base System - Air Cart

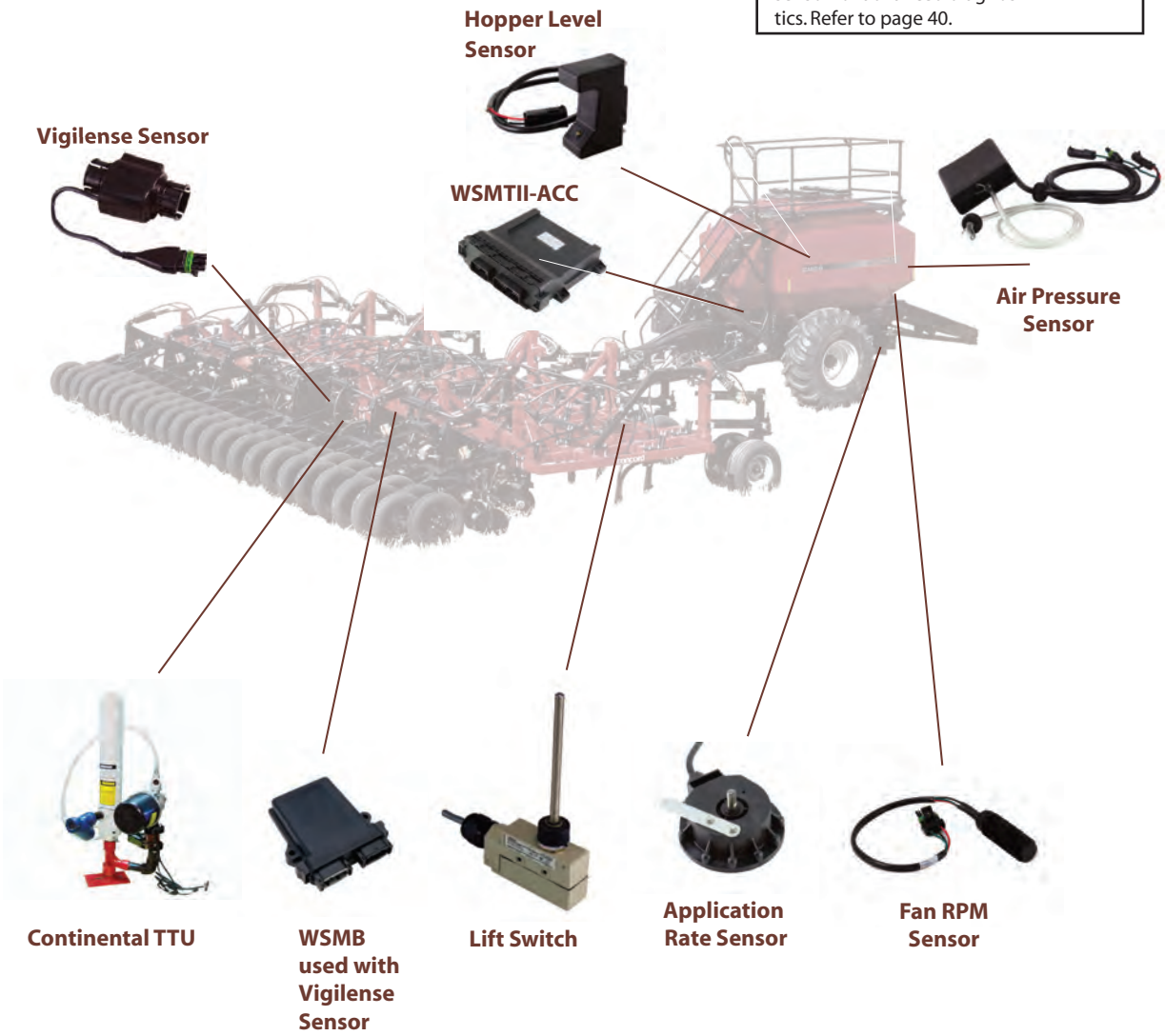
- IntelliAg Virtual Terminal AI-120 or AI-100 color touch screen
- Tractor harness for use with 12" Virtual Terminal
- System power harness with ISO hitch connector
- ISO master switch to control on/off
- Hitch extension harness
- ACC - WSMT2
- WSMT2 T harness
- Control harness for connection to valves and feedback sensors

Accessory Module WSMB

An accessory module connects to the Accessory Harness 467980205 to add up to 4 hopper, 4 air, and 4 RPM sensors.

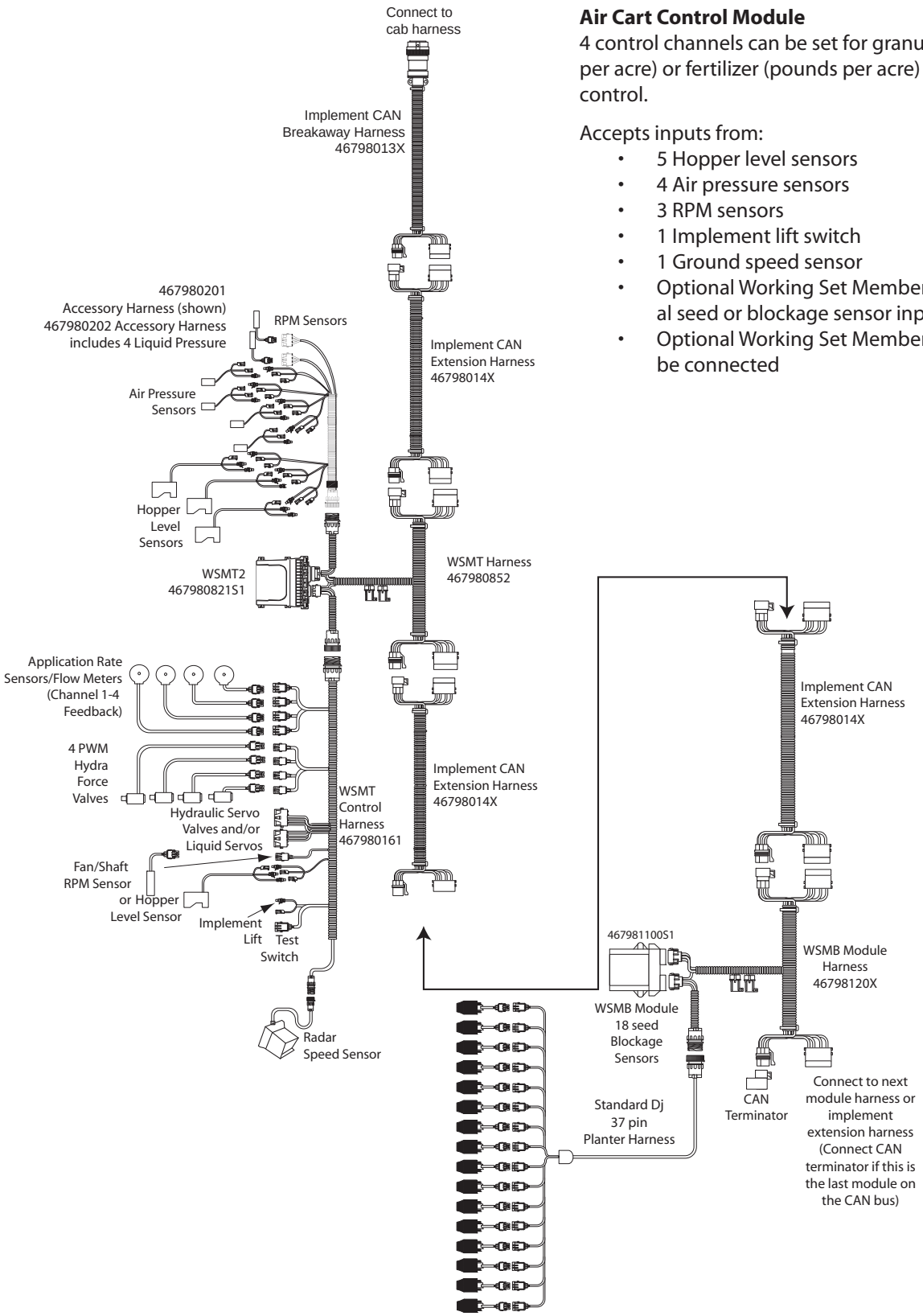
Daisy Chain Blockage Sensor System

Monitors seed and fertilizer flow on air seeder applications for blockage. Uses the Daisy Chain 2-way communication sensor for advanced diagnostics. Refer to page 40.



IntelliAg®

Air Cart Control


Connect to cab harness
Implement CAN Breakaway Harness 46798013X
467980201 Accessory Harness (shown) 467980202 Accessory Harness includes 4 Liquid Pressure
RPM Sensors
Implement CAN Extension Harness 46798014X
Air Pressure Sensors
Hopper Level Sensors
WSMT2 467980821S1
WSMT Harness 467980852
Application Rate Sensors/Flow Meters (Channel 1-4 Feedback)
4 PWM Hydra Force Valves
Hydraulic Servo Valves and/or Liquid Servos
WSMT Control Harness 467980161
Implement CAN Extension Harness 46798014X
Fan/Shaft RPM Sensor or Hopper Level Sensor
Implement Lift Test Switch
Radar Speed Sensor
Implement CAN Extension Harness 46798014X
467981100S1
WSMB Module Harness 46798120X
WSMB Module 18 seed Blockage Sensors
Standard Dj 37 pin Planter Harness
CAN Terminator
Connect to next module harness or implement extension harness (Connect CAN terminator if this is the last module on the CAN bus)

Air Cart Control Module

4 control channels can be set for granular seeding (pounds per acre) or fertilizer (pounds per acre) application plus NH3 control.

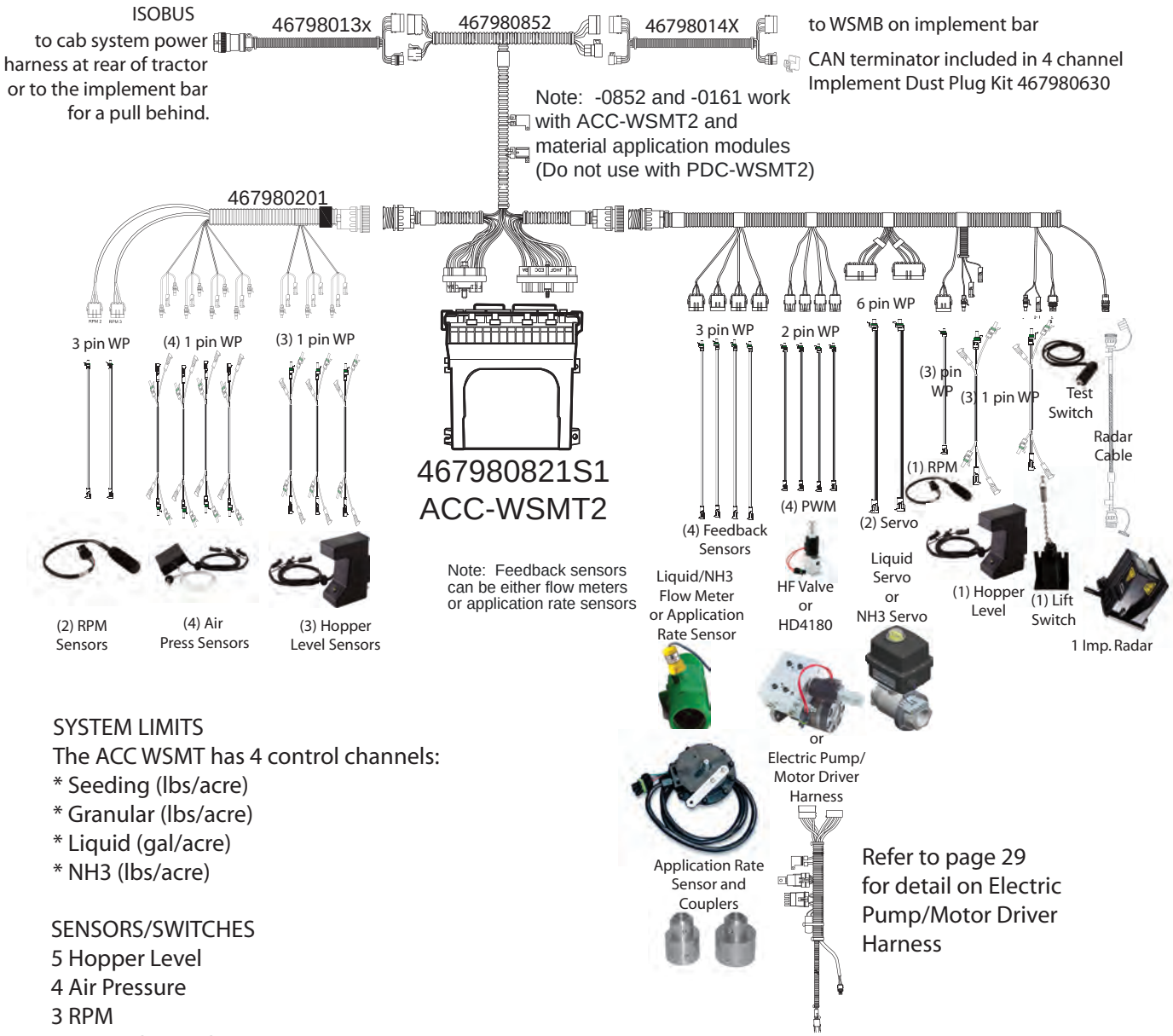
Accepts inputs from:

- 5 Hopper level sensors
- 4 Air pressure sensors
- 3 RPM sensors
- 1 Implement lift switch
- 1 Ground speed sensor
- Optional Working Set Member can accept additional seed or blockage sensor inputs
- Optional Working Set Member output modules may be connected

Control Harnessing

-0161 Control Harness/-0852 WSMT Harness/ -0201 Accessory Cable

-0852/-0161 use with ACC-WSMT2 and Material Application Modules only


ISOBUS
to cab system power harness at rear of tractor or to the implement bar for a pull behind.
46798013x
467980852
46798014X
to WSMB on implement bar
CAN terminator included in 4 channel Implement Dust Plug Kit 467980630
Note: -0852 and -0161 work with ACC-WSMT2 and material application modules (Do not use with PDC-WSMT2)
467980201
3 pin WP
(4) 1 pin WP
(3) 1 pin WP
467980821S1
ACC-WSMT2
3 pin WP
2 pin WP
6 pin WP
(3) pin WP
(3) 1 pin WP
Test Switch
Radar Cable
(1) RPM
(4) PWM
(2) Servo
(4) Feedback Sensors
Note: Feedback sensors can be either flow meters or application rate sensors
Liquid/NH3 Flow Meter or Application Rate Sensor
HF Valve or HD4180
Liquid Servo or NH3 Servo
(1) Hopper Level
(1) Lift Switch
1 Imp. Radar
(2) RPM Sensors
(4) Air Press Sensors
(3) Hopper Level Sensors
or
Electric Pump/ Motor Driver Harness
Application Rate Sensor and Couplers

SYSTEM LIMITS
The ACC WSMT has 4 control channels:
* Seeding (lbs/acre)
* Granular (lbs/acre)
* Liquid (gal/acre)
* NH3 (lbs/acre)

SENSORS/SWITCHES
5 Hopper Level
4 Air Pressure
3 RPM
1 Ground Speed
1 Lift Switch

Refer to page 29 for detail on Electric Pump/Motor Driver Harness

* ACC WSMT will not accept inputs directly from seed blockage sensors. A WSMB module is required accepting 18 rows per module.

IntelliAg®

System Parts List

Hitch Extensions

Hitch Extension 6’	467980134
Hitch Extension 10‘	467980132
Hitch Extension 15’	467980136
Hitch Extension 20‘	467980131
Hitch Extension 30’	467980133
Hitch Extension 40‘	467980130
Hitch Extension 50’	467980135

Implement Harness

WSMT	467980821S1
WSMT Harness	467980852
CAN Extension 5‘	467980142
CAN Extension 10’	467980141
CAN Extension 20’	467980140
CAN Extension 25‘	467980143
CAN Extension 40’	467980144
CAN Extension 45‘	467980146
4 Ch. Imp. Dust Plug Kit w/CAN Term.	467980630
Ty Wrap Bundle 100 14”	110110099
ACC User Manual	110011463
Control Harness	467980161
Accessory Input Harness	467980201
Accessory Input Harness +4 Liquid PSI	467980202

Application Rate Sensor

AR Sensor 360 1’ Cable	464360178S1
AR Sensor 360 5‘ Cable	464360176S1
App. Rate 1” coupler	457141810
App. Rate 1.25” coupler	457141850
HD4180 to AR Sensor coupler	467092221
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Pulse-Width Modulation Controls 1-4

Hydraulic Valve Hydra Force 4 gpm	467092004S1
Hydraulic Valve Hydra Force 8 gpm	467092008S1
Hydraulic Valve Hydra Force 25 gpm	467092050S1
HD4180 w/Integrated Valve	467092200S1
12 Ga. 2Pin WP Ext. Cable 15’	467980470
12 Ga. 2Pin WP Ext. Cable 20’	467980471
12 Ga. 2Pin WP Ext. Cable 30’	467980473
12 Ga. 2Pin WP Ext. Cable 40’	467980472

Lift Switch and Radar

Implement Lift Switch	463720150S1
Lift Switch - Whisker Type	464820520S1
3-1Pin WP Ext. Cable 5’	466820713
3-1Pin WP Ext. Cable 10‘	466820712S1
3-1Pin WP Ext. Cable 15’	466820714
3-1Pin WP Ext. Cable 20‘	466820710S3
Radar III w/14’ Cable & Mtg Brkt	467831000S9
Radar Extension 10‘	439400024
Radar Extension 15’	439400065
Radar Extension 25’	439400064
Test Switch	464210515S1

Hopper Level Sensors

Hopper Level Sensor	466820720S3
Hopper Level Sensor w/ 1/2” Bushing	466820721S1
3-1Pin WP Ext. Cable 5’	466820713
3-1Pin WP Ext. Cable 10‘	466820712S1
3-1Pin WP Ext. Cable 15’	466820714
3-1Pin WP Ext. Cable 20‘	466820710S3

Air Pressure 1-4

Air Pressure Sensor	466820920S1
Air Pressure Sensor w/ 1/2” Bushing	466820922S1
3-1Pin WP Ext. Cable 5’	466820713
3-1Pin WP Ext. Cable 10‘	466820712S1
3-1Pin WP Ext. Cable 15’	466820714
3-1Pin WP Ext. Cable 20‘	466820710S3

RPM Sensors

Hall Effect Sensor RPM (Smooth)	463500030S1
Hall Effect Sensor RPM (Threaded)	466970014S1
Extension Cable 3Pin WP 15’	459680922

Flow Meters

Flow Meter 1/2”	PM00370018S1
Flow Meter 3/4”	PM00370023S1
Flow Meter 1“	PM00370030S1
Flow Meter 1.5”	PM00370040S1
Flow Meter 2“	PM00370048S1
Flow Meter 3”	PM00370068S1
Flow Meter 4“	PM00370088S1
SS Flow Meter 1/2”	PMNPT70116S1
SS Flow Meter 3/4”	PMNPT70121S1
SS Flow Meter 1”	PMNPT70126S1
SS Flow Meter 1-1/2”	PMNPT70136S1
SS Flow Meter 2”	PMNPT70146S1
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Liquid Valve and Actuator (liquid flow control)

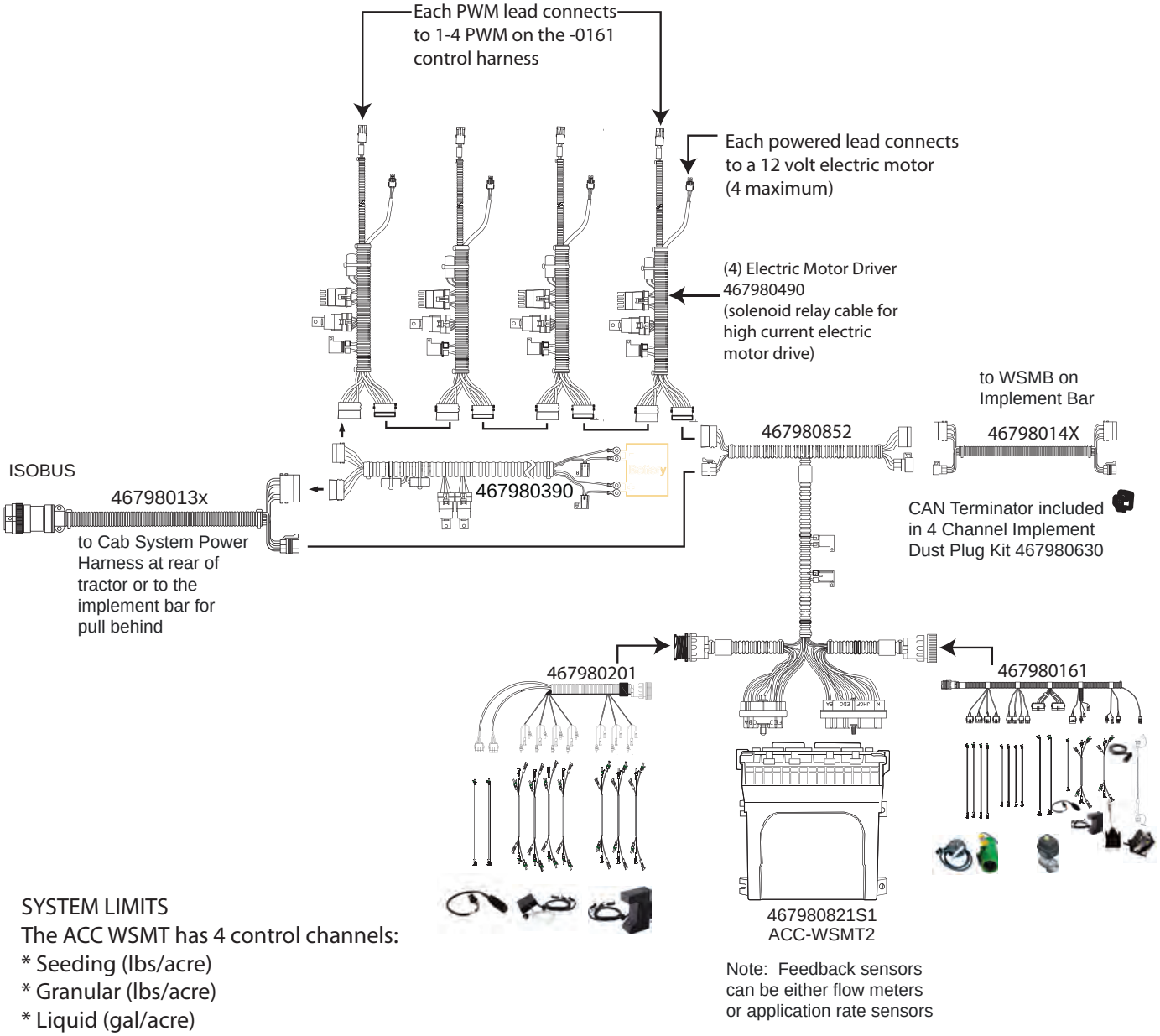
Valve & Actuator Assy. 3/8” 2-Way Stainless Steel	467095010
Valve & Actuator Assy. 3/8” 3-Way Stainless Steel	467095220
Valve & Actuator Assy. 1/2” 2-Way Stainless Steel	467095020
Valve & Actuator Assy. 3/4” 2-Way Poly	467095030
Valve & Actuator Assy. 1” 2-Way Poly	467095280
Valve & Actuator Assy. 1” 2-Way Stainless Steel	467095290
Valve & Actuator Assy. 1-1/2” 3-Way Poly	467095050
Valve & Actuator Assy. 1-1/2” 3-Way Stainless Steel	467095140
Valve & Actuator Assy. 2” 2-Way Stainless Steel	467095150
Valve & Actuator Assy. 2” 3-Way Stainless Steel	467095160
Valve & Actuator Assy. 3” 2-Way Stainless Steel	467095170
6Pin WP Extension Cable 15’	457901820
6Pin WP Extension Cable 30’	457901821

Electric Motor Driver

High Current Electric Motor Harness	467980490
Power Harness (High current > than 10 A	467980390

Control Harnessing

-0160 Control Harness and -0490 Electric Motor Drive Cable


Each PWM lead connects to 1-4 PWM on the -0161 control harness
Each powered lead connects to a 12 volt electric motor (4 maximum)
(4) Electric Motor Driver 467980490 (solenoid relay cable for high current electric motor drive)
to WSMB on Implement Bar
467980852
46798014X
ISOBUS
46798013x
467980390
to Cab System Power Harness at rear of tractor or to the implement bar for pull behind
CAN Terminator included in 4 Channel Implement Dust Plug Kit 467980630
467980201
467980161
467980821S1
ACC-WSMT2
Note: Feedback sensors can be either flow meters or application rate sensors

SYSTEM LIMITS
The ACC WSMT has 4 control channels:
* Seeding (lbs/acre)
* Granular (lbs/acre)
* Liquid (gal/acre)
* NH3 (lbs/acre)

SENSORS/SWITCHES
5 Hopper Level
4 Air Pressure
3 RPM
1 Ground Speed
1 Lift Switch

ACC WSMT will not accept inputs directly from seed sensors. A WSMB module is required accepting18 rows per module.

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System Parts List

Application Rate Sensors

AR Sensor 360 1' Cable	464360178S1
AR Sensor 360 5' Cable	464360176S1
App. Rate 1" coupler	457141810
App. Rate 1.25" coupler	457141850
3Pin WP Ext. Cable 15'	457901810
3Pin WP Ext. Cable 30'	457901811
3Pin WP Ext. Cable 45'	457901812

Pulse Width Modulation Controls

ADX Power Harness	467980390
Electric Motor Driver Harness	467980490
12 Ga. 2Pin WP Ext. Cable 15'	467980470
12 Ga. 2Pin WP Ext. Cable 20'	467980471
12 Ga. 2Pin WP Ext. Cable 30'	467980473
12 Ga. 2Pin WP Ext. Cable 40'	467980472

Optional Sensors

Implement Lift Switch	463720150S1
Lift Switch - Whisker Type	464820520S1
Hopper Level Sensor	466820720S3
Hopper Level Sensor w/ 1/2" Bushing	466820721S1
Air Pressure Sensor	466820920S1
Air Pressure Sensor w/ 1/2" Bushing	466820922S1
3-1Pin WP Ext. Cable 5'	466820713
3-1Pin WP Ext. Cable 10'	466820712S1
3-1Pin WP Ext. Cable 15'	466820714
3-1Pin WP Ext. Cable 20'	466820710S3
Radar III w/14' Cable & Mtg Brkt	467831000S9
Radar Extension 10'	439400024
Radar Extension 25'	439400064
Test Switch	464210515S1

RPM Sensors

RPM (Smooth)	463500030S1
RPM (Threaded)	466970014S1
Extension Cable 3Pin WP 15'	459680922

Flow Meters

Flow Meter 1/2"	PM00370018S1
Flow Meter 3/4"	PM00370023S1
Flow Meter 1"	PM00370030S1
Flow Meter 1.5"	PM00370040S1
Flow Meter 2"	PM00370048S1
Flow Meter 3"	PM00370068S1
Flow Meter 4"	PM00370088S1
SS Flow Meter 1/2"	PMNPT70116S1
SS Flow Meter 3/4"	PMNPT70121S1
SS Flow Meter 1"	PMNPT70126S1
SS Flow Meter 1-1/2"	PMNPT70136S1
SS Flow Meter 2"	PMNPT70146S1
3Pin WP Ext. Cable 15'	457901810
3Pin WP Ext. Cable 30'	457901811
3Pin WP Ext. Cable 45'	457901812

Liquid Valve and Actuator

Valve & Actuator Assy. 3/8" 2-Way Stainless Steel	467095010
Valve & Actuator Assy. 3/8" 3-Way Stainless Steel	467095220
Valve & Actuator Assy. 1/2" 2-Way Stainless Steel	467095020
Valve & Actuator Assy. 3/4" 2-Way Poly	467095030
Valve & Actuator Assy. 1" 2-Way Poly	467095280
Valve & Actuator Assy. 1" 2-Way Stainless Steel	467095290
Valve & Actuator Assy. 1-1/2" 3-Way Poly	467095050
Valve & Actuator Assy. 1-1/2" 3-Way Stainless Steel	467095140
Valve & Actuator Assy. 2" 2-Way Stainless Steel	467095150
Valve & Actuator Assy. 2" 3-Way Stainless Steel	467095160
Valve & Actuator Assy. 3" 2-Way Stainless Steel	467095170
6Pin WP Extension Cable 15'	457901820
6Pin WP Extension Cable 30'	457901821

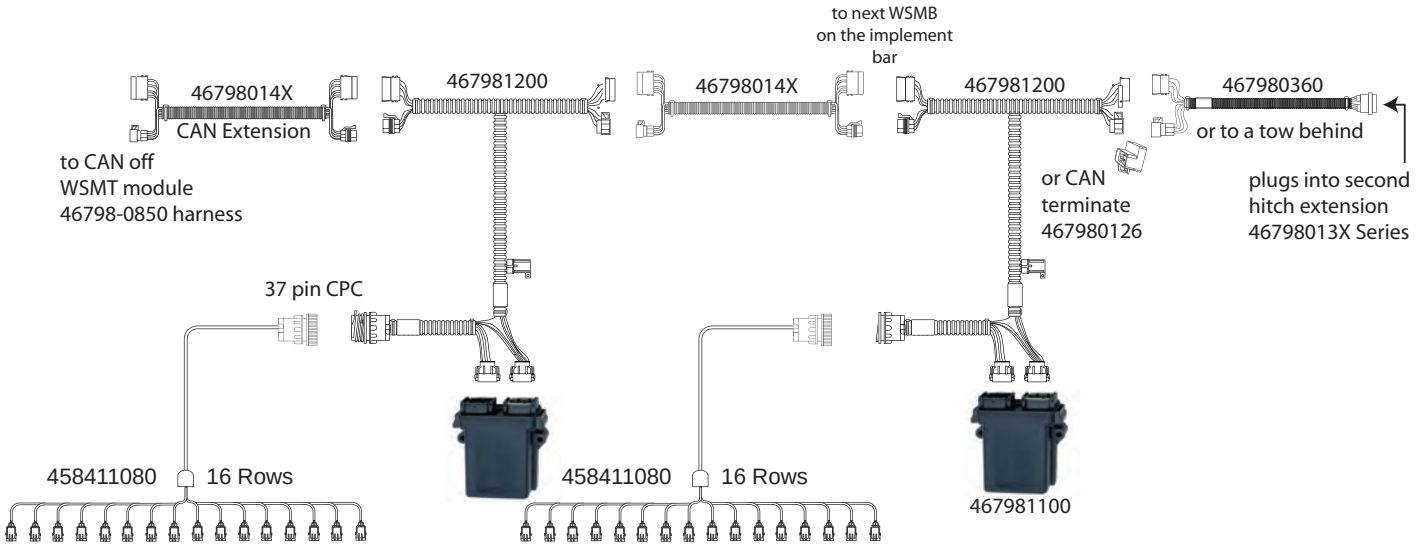
Electric Motor Driver

High Current Electric Motor Harness	467980490
Power Harness (High current > than 10 A	467980390

Add Additional Rows

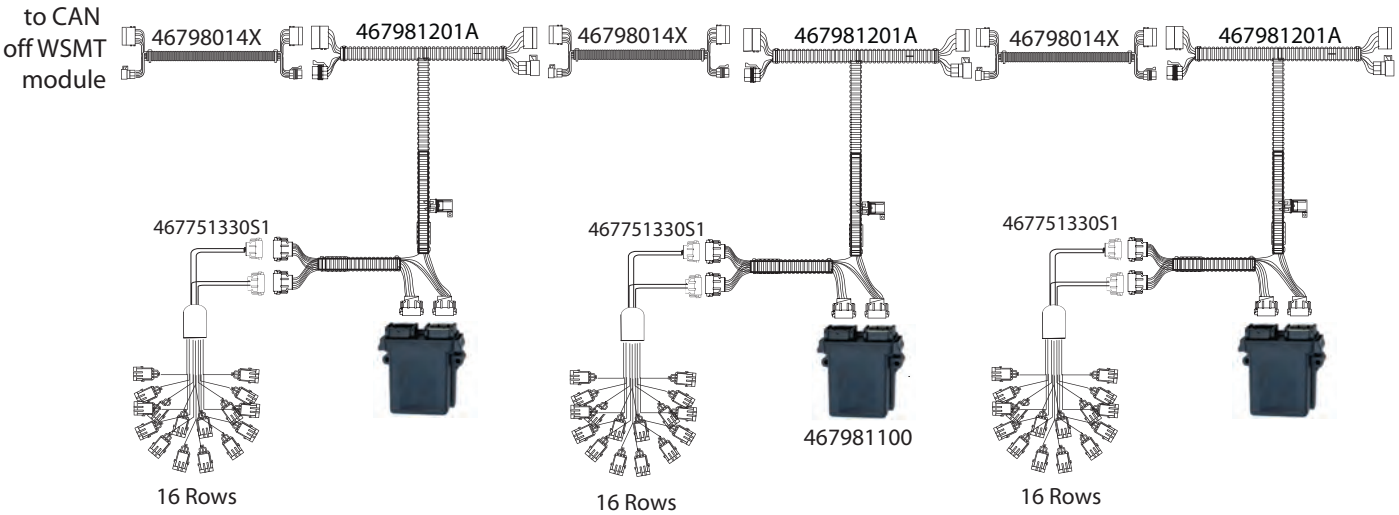
Row Harnesses

37 pin CPC WSMB Harness



SYSTEM LIMITS
18 Seed Rows per WSMB
12 WSMB modules per ACC WSMT
10 WSMB modules per PDC WSMT

SE Style WSMB Harness



System Parts List

Hitch Extensions

Hitch Extension 6’	467980134
Hitch Extension 10‘	467980132
Hitch Extension 15’	467980136
Hitch Extension 20‘	467980131
Hitch Extension 30’	467980133
Hitch Extension 40‘	467980130
Hitch Extension 50’	467980135

Implement Harnessing

WSMB	467981100S1
WSMB Harness	467981201
CAN Extension 5‘	467980142
CAN Extension 10’	467980141
CAN Extension 20’	467980140
CAN Extension 25‘	467980143
CAN Extension 40’	467980144
CAN Extension 45’	467980146
CAN Terminator	467980126

CAN to Hitch Connector Harness

This harness accommodates
disconnection of a tow behind.

Rear Implement Hitch Harness 3‘	467980360
Rear Implement Hitch Harness IBBC 6’	467980361
Rear Implement Hitch Harness IBBC 20’	467980362
Rear Implement Hitch Harness IBBC 25‘	467980363

Row Harness (37 pin CPC)

4 Row Planter Harness	458410530
6 Row Planter Harness	458410550
8 Row Planter Harness	458410570
12 Row Planter Harness	458410590
16 Row Planter Harness (in diagram)	458411080

12 Row Y Cable to use 2-6 Row Pltr Hrn	459680960
16 Row Y Cable to use 2-8 Row Pltr Hrn	459680950
16 Row 2-8 Row Pltr Hrn w/16 Row Y	458410600
24 Row Y Cable to use 2-12 Row Hrn	459680940
JD 32 Row Reverse Y Harness	467980445
32 Row Reverse Y Harness	467980446

Row Harness Extensions

6 Ft. Extension (16 row)	458410810
15 Ft. Extension (16 row)	459680320
30 Ft. Extension (16 row)	459680321
15 Ft. Extension (32 row)	458410820
30 Ft. Extension (32 row)	458410790

Row Harness (SE Style)

Used In This Example:

18 Row SE style Air Cart	467980280

Other SE style Harnesses

12 Row 7.5”	467751300S1
12 Row 15”	467751301S1
12 Row 30”	467751302S1
16 Row 7.5”	467751310S1
16 Row 15”	467751311S1
16 Row 30”	467751312S1
12 Row Air Cart Tower	467751320S1
16 Row Air Cart Tower	467751330S1
18 Row Air Cart Tower	467980280

Seed Sensor Extensions

3’ Sensor Extension 3Pin WP	459680920
4’ Sensor Extension 3Pin WP	459680923S1
6’ Sensor Extension 3Pin WP	459680921
15’ Sensor Extension 3Pin WP	459680922

Seed and Blockage Sensors

Vigilense 25 mm	467420701S1
Vigilense 25 mm with SS Insert	467420702S1
Vigilense 32 mm	467420711S1
Vigilense 32 mm with SS Insert	467420712S1
Vigilense 45 mm	467420720S1
Vigilense 45 mm with SS Insert	467420721S1

Monosem Mecca 2000	467700090S1
Monosem MS Vegetable	467700100S1
Stanhay Dart II	467700220S1
Case ASM Hi-Rate Sensor Only	467760010S1

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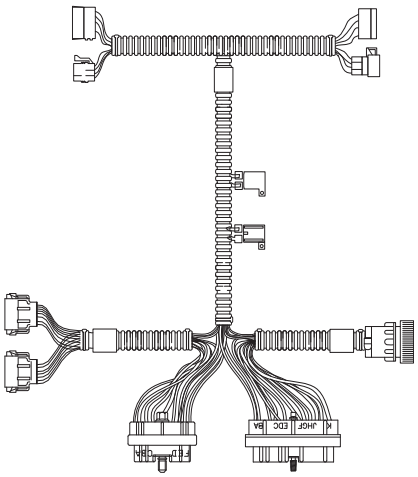
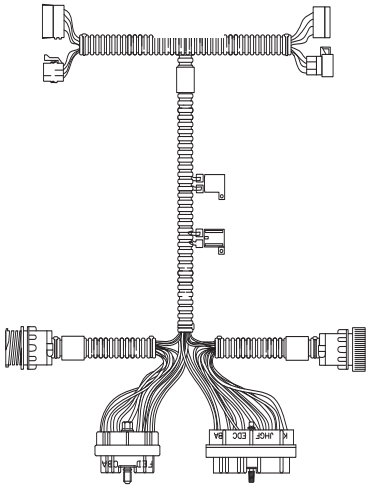
WSMT2



WSMT Harness 467980851



WSMT Harness 467980850 and -0852

Cab to Implement Harness Hitch Extension 46798013X

Working Set Master Module (WSMT2)

The Working Set Master Module (WSMT2) houses the system's primary interface device. All system parameters, constants, and memory are stored in the WSMT and controls the application of material by interfacing with proportional hydraulic valves and feedback sensors. Several WSMT modules are available for a variety of applications.

Working Set Master Module	
Part Number	**Description**
46798-0821S1	Module, ACC-WSMT2 (Aircart Control)
46798-0630	4 Channel Implement Dust Plug Kit with Terminators
11011-0099	Ty Wrap Bundle 100 14 in.

Working Set Master Harness

WSMT Harnessing	
Part Number	**Description**
46798-0851	WSMT Harness Seed Manager SE style without APER (PDC)
46798-0852	WSMT Harness with 37-pin CPC with APER (Material Application)

NOTES:
SE style harnesses have 1 gray and 1 black 12-pin Deutsch DT connector

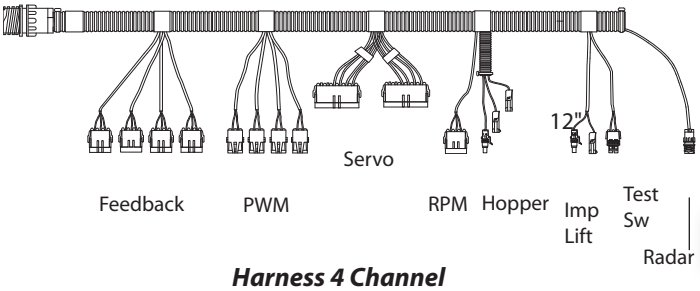
Cab to Implement Harness Hitch Extension

Tractor Cab to Implement Harness Hitch Extensions	
Part Number	**Description**
46798-0134	6 ft. Hitch Extension ISO system CAN
46798-0132	10 ft. Hitch Extension ISO system CAN
46798-0136	15 ft. Hitch Extension ISO system CAN
46798-0131	20 ft. Hitch Extension ISO system CAN
46798-0133	30 ft. Hitch Extension ISO system CAN
46798-0130	40 ft. Hitch Extension ISO system CAN
46798-0135	50 ft. Hitch Extension
46798-0457	40 ft. Hitch to Hitch Extension

Implement Kit

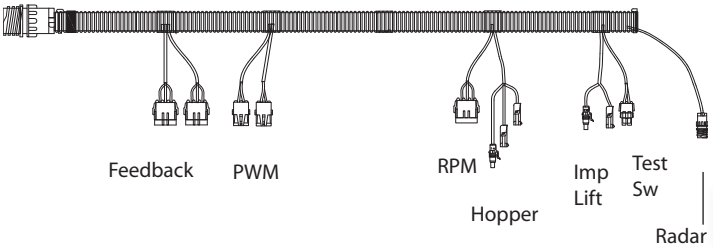
IAACCIMPKIT Air Cart Control Implement Kit consists of the following	
Part Number	**Description**
46798-0821S1	Module, ACC-WSMT2 (Aircart Control)
46798-0852	WSMT Harness with 37-pin CPC with APER (Material Application)
46798-0161	Control Harness
46798-0630	4 Channel Implement Dust Plug Kit with Terminators
11001-1514	Operator's Manual User Level 2
11001-1515	Operator's Manuarl User Level 1

IntelliAg® *WSMT2 Harnesses (Control Channels/Accessory Inputs)*

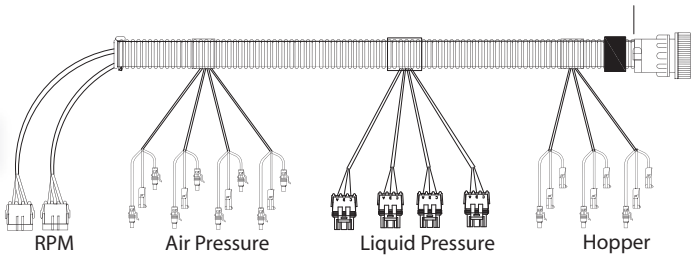


Harness 4 Channel
467980161

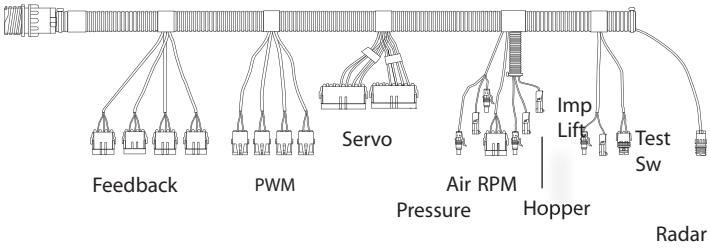
PM Style Control Harnesses	
Part Number	**Description**
46798-0161	WSMT Material Application 4 Ch Actuator Harness with APER (app error rate)
46798-0162	WSMT Air Cart Control 2 Ch Actuator/Sensor Harness
46798-0164	WSMT 4 Ch Actuator Harness with RPM or Air Pressure
46798-0201	Air Cart Control WSMT Input Harness (2 RPM, 4 Air Pressure, 3 Hopper Level)
46798-0202	Air Cart Control WSMT Input Harness (2 RPM, 4 Air Pressure, 4 Liquid, 3 Hopper Level)



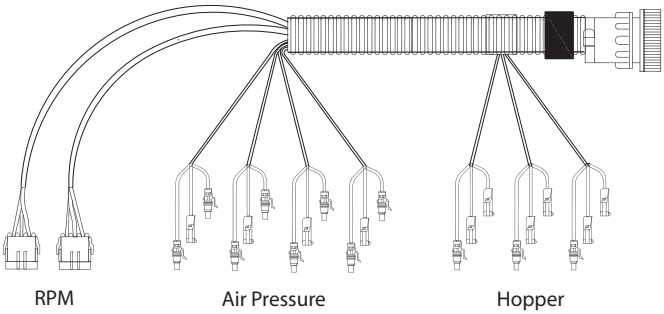
Harness 2 Channel
467980162



Harness with RPM/Air Pressure/Liquid/Hopper
467980202



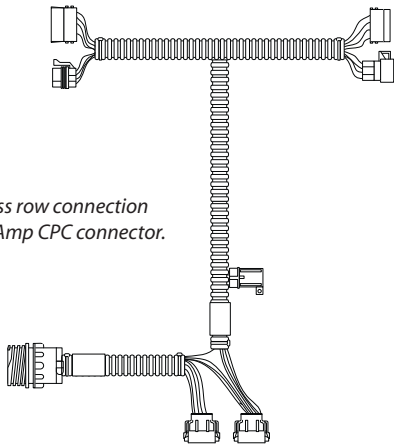
Harness with RPM/Air Pressure
467980164



Harness with RPM/Air Pressure/Hopper
467980201

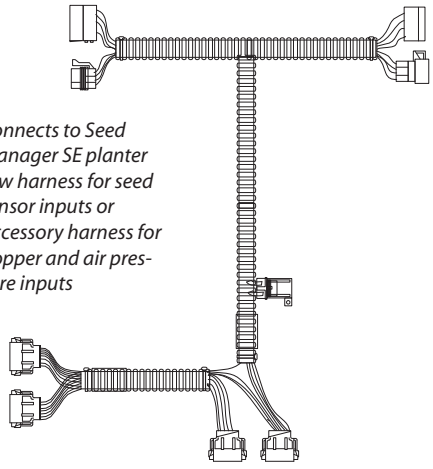
IntelliAg®

WSMB



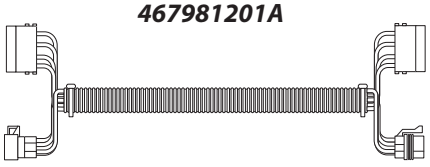
WSMB Harness row connection has a 37-pin Amp CPC connector.

WSMB Harness
467981200



Connects to Seed Manager SE planter row harness for seed sensor inputs or Accessory harness for hopper and air pressure inputs

WSMB Harness SE Style
467981201A



WSMB Extension Harness
46798014X

Working Set Member Module

The Working Set Member Module (WSMB) is an auxiliary to the Working Set Master Module (WSMT). Each WSMB can accept up to 18 rows of seed sensors and passes information direct to the WSMT. Up to 11 WSMB's can be installed to monitor up to 214 rows. The flexible design allows for installation virtually anywhere on the implement.

Working Set Member Module (WSMB)	
Part Number	**Description**
46798-1100S1	WSMB Module (18 seed rows)
46798-1105S1	WSMB Module ACC (4 hopper, 4 air, 4 RPM)

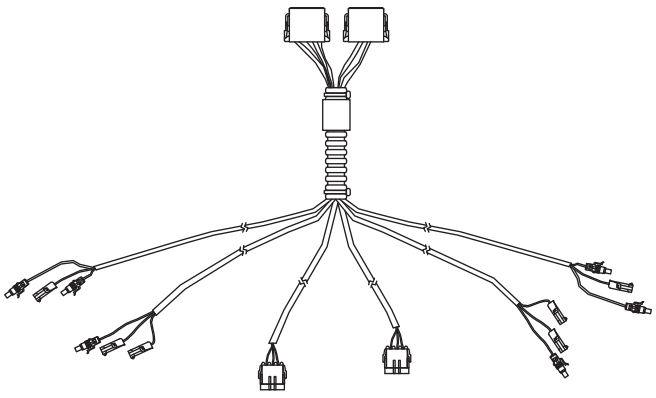
WSMB Harness

WSMB Harnesses	
Part Number	**Description**
46798-1200	WSMB Harness to 37-pin CPC Planter Row Harness (connects to 46798-1100S1)
46798-1201A	WSMB Harness ACC T Harness (connects to 46798-1105S1)
46798-0205	Accessory Harness 4 hopper, 4 air, 4 RPM (connects to 46798-1201A)

WSMB Harness SE style row connection has 1 gray and 1 black, 12-pin Deutsch DT connector.

WSMB CAN Extension Harness

WSMB Harnesses	
Part Number	**Description**
46798-0142	WSMB Extension 5 ft.
46798-0141	WSMB Extension 10 ft.
46798-0140	WSMB Extension 20 ft.
46798-0143	WSMB Extension 25 ft.
46798-0144	WSMB Extension 40 ft.
46798-0146	WSMB Extension 45 ft.



WSMB Accessory Harness
467980205

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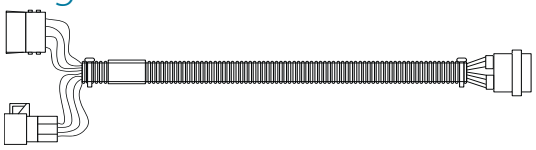
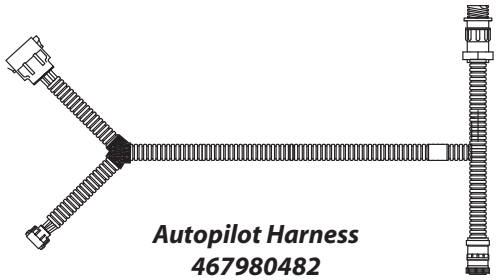


Rear Implement Hitch Harness (Deutsch)
46798-0360

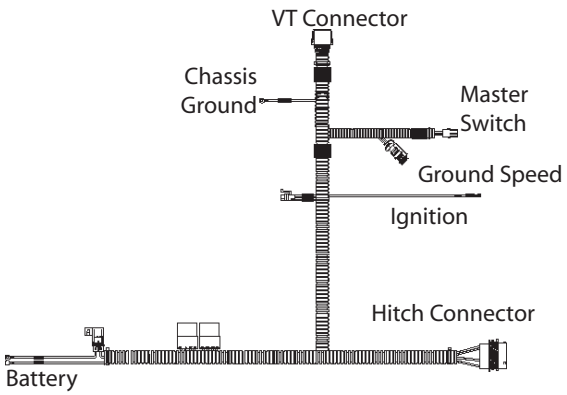
Rear Implement Hitch Harness (IBBC)
467980361

Rear Implement Hitch Harness (IBBC)
467980362

Rear Implement Hitch Harness (IBBC)
467980363



Autopilot Harness
467980482



European ISO Tractor Harness
467980128

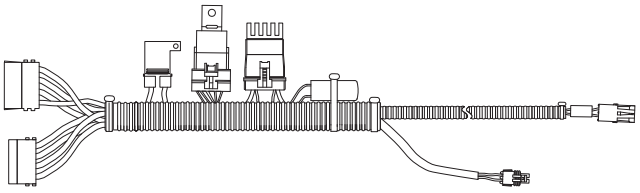
CAN to Hitch Connector Harnesses

Harness accommodates disconnection between implement and tow-behind aircart to second hitch extension.

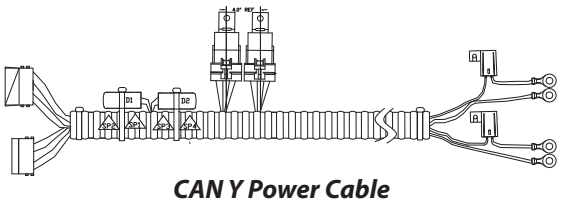
Rear Implement Hitch Harness	
Part Number	**Description**
46798-0360	Rear Implement Hitch Harness with Deutsch 9-pin (CAN to Hitch) 3 ft.
46798-0361	Rear Implement Hitch Harness with IBBC 9-pin (CAN to Hitch) 6 ft.
46798-0362	Rear Implement Hitch Harness with IBBC 9 pin 20 ft.
46798-0363	Rear Implement Hitch Harness with IBBC 9 pin 25 ft.

Adapter Harnesses

Adapter Harness	
Part Number	**Description**
46798-0490	Electric Motor Driver (solenoid relay cable for high current electric motor drive)
46798-0128	European ISO Tractor Harness (short)
46798-0390	CAN Power Y Cable (used with 46798-0490)



Electric Motor Driver
467980490



CAN Y Power Cable
467980390

WSMB Output Module

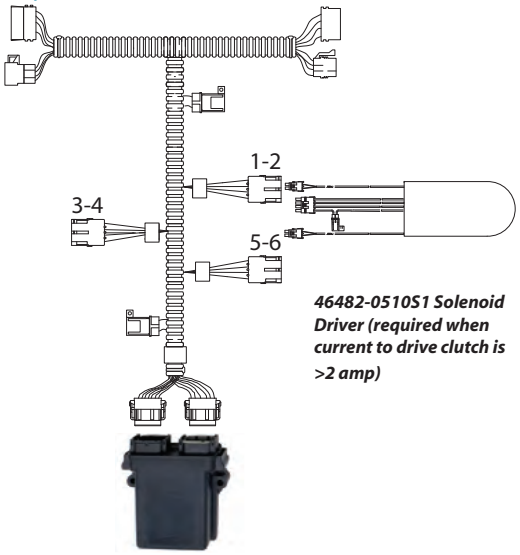
Implement

A WSMB Output Module communicates with the Row and Boom Switch Module for section on/off control.

Row Shutoff Parts	
Part Number	**Description**
46798-2000S1	Output Shutoff Module
46798-3501	Row Shutoff Planter Output Module Harness (disengage)
46798-3504	Planter Output Module Harness for Electric Clutches (engage)
46798-3505	Tru Count Clutch Module Harness
46798-3508	Planter POM Generic Harness
46798-3100	Liquid Boom Shutoff Harness (6 Boom/3 Wire Shutoff)
46798-3101	Liquid Boom Shutoff Harness (6 Boom/2 Wire Shutoff) (used with non-DICKEY-john Valves and 464820510)
46798-2100	Row Shutoff (RSO) Harness (12 solenoid)
46482-0510S1	Solenoid Driver (plugs into 46798-3501 and -3101 for current >2 Amp)

Planter POM Generic Harness

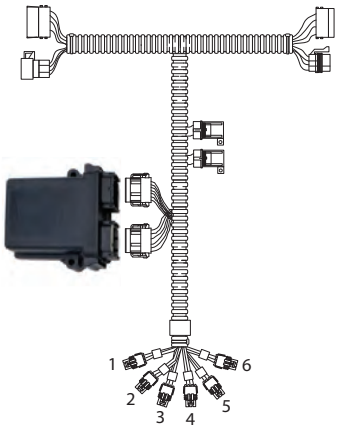
Switch
On = 12 V
Off = 0 V



46482-0510S1 Solenoid Driver (required when current to drive clutch is >2 amp)

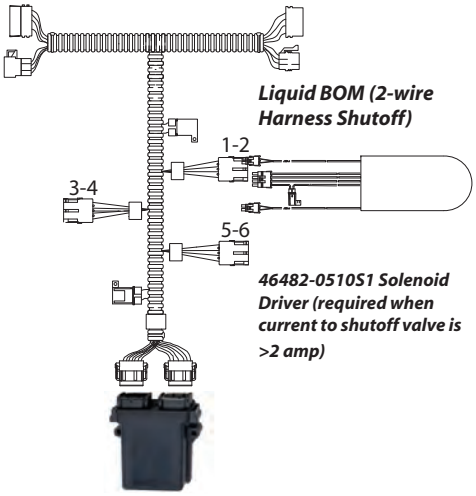
467983501

Liquid BOM Harness (3-wire Shutoff)



467983100

Output Shutoff Module



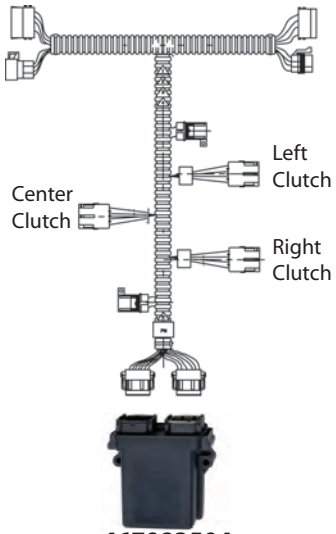
Liquid BOM (2-wire Harness Shutoff)

46482-0510S1 Solenoid Driver (required when current to shutoff valve is >2 amp)

467983101

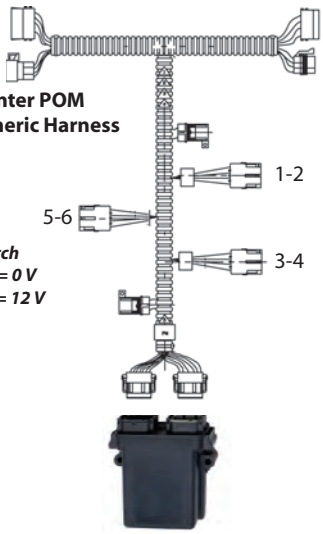
6 Solenoid YP24 Great Plains Output Clutch Harness

Switch
On = 12 V
Off = 0 V



467983504

Planter POM Generic Harness

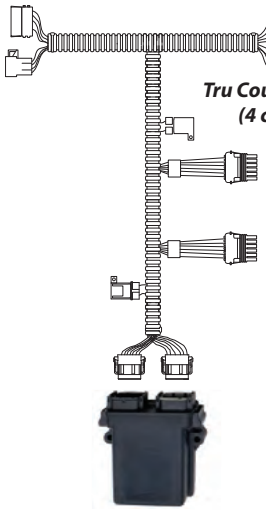


Switch
On = 0 V
Off = 12 V

467983508

Tru Count Solenoid Module (4 clutches per module)

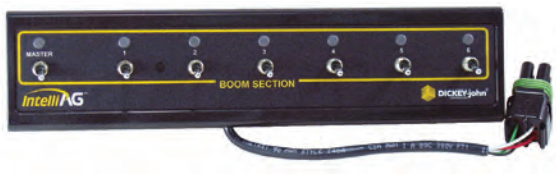
Switch
On = 0 V
Off = 12 V



467983505

Control Switch Module

Cab



Boom Switch Module

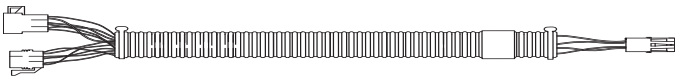
Extended Shutoff Module

Planter Row Switch Module

Boom Switch Module controls up to 24 boom on/off shutoff valves.

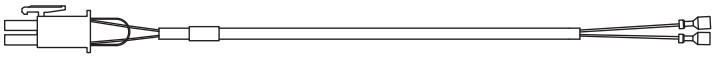
Switch modules placed in the cab allow each row/section to be controlled or use the master switch for all row/section on or off.

Boom Switch Module Parts	
Part Number	**Description**
46798-4030S1	Boom Switch Module (BSM) (1-6 row)
46798-4040S1	Extended Shut Off Module (ESM) (7-24 row)
46798-4264S1	Planter Row Switch Module
46798-4150	BSM/ESM Mounting Bracket (mounts 4 total) for use with 5" virtual terminal (AI-50)
46798-4160	BSM/ESM U-Mount Bracket (accommodates mounting 46798-4030S1 Boom Switch Module)
46798-0330	BSM Harness to Tractor Harness
46798-0340	BSM Harness 60" CAN Extension
46798-4180S1	ESM Foot Switch Cable (Liquid)
46798-0625S1	BSM/ESM Mounting Bracket for use with 10" Virtual Terminal (AI-100)
46798-0626S1	BSM/ESM Mounting Bracket for use with 12" Virtual Terminal (AI-120)

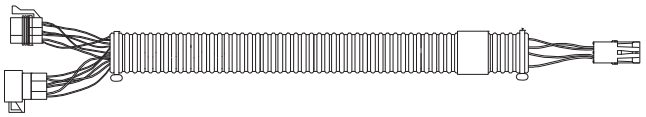


BSM Harness 24"
467980330

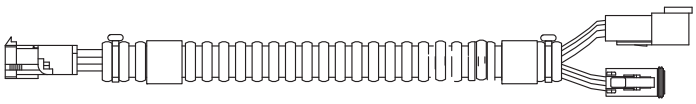
BSM CAN Harness Extension 60"
467980340



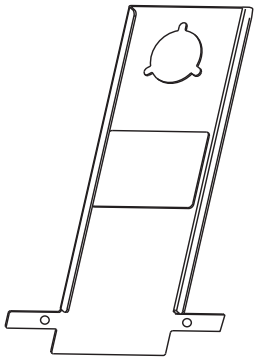
ESM Foot Switch Cable 96"
467984180



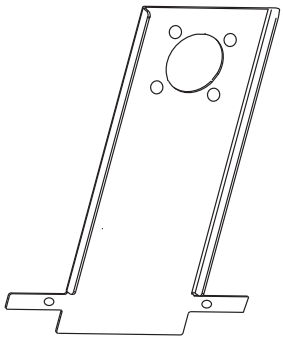
Case Tractor Cab Harness 24"
467980330



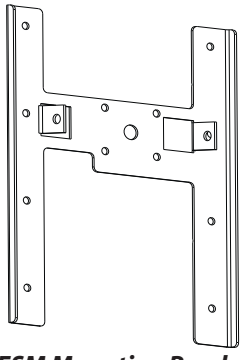
CFM to JD GS2 Cab Harness
467980335



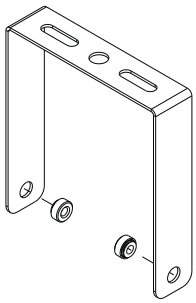
BSM/ESM Mounting Bracket
(AI-120) 467980626



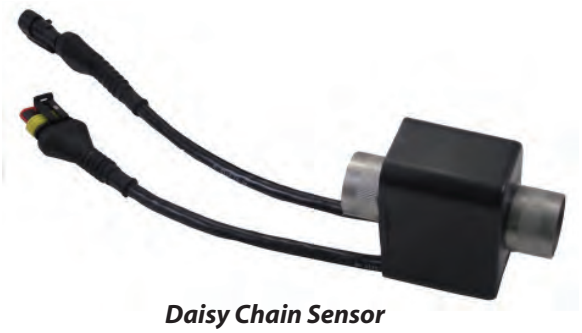
BSM/ESM Mounting Bracket
(AI-100) 467980625



BSM/ESM Mounting Bracket
467984150



BSM U Mount Bracket
467984160



Daisy Chain Sensor

Daisy Chain Module

Daisy Chain Blockage Detection System

The Daisy Chain blockage detection system monitors seed and fertilizer flow on air seeder applications to determine if distribution hoses are open or blocked. Sensors are connected to each other in a serial chain layout contained within the loop.

The system is designed with redundant communication between sensors so that any defective sensor within the system does not shutdown the entire blockage system. Blockage full screen alarms quickly pinpoint exact sensor blockage, communication, or wiring issues to remove guesswork from troubleshooting.

One module can connect to 1 or 2 loops. A maximum of 4 modules and 8 loops connect to sensors that communicate blockage and system status for display on the virtual terminal.

The blockage system is compatible with any ISO virtual terminal including DICKEY-john, Case, John Deere, and AGCO terminals.

Features:

- Monitors up to 4 modules and a total of 8 loops
- Each module can interface with a maximum of 2 sensor loops
- Maximum number of sensors per loop is 54 for a total of 432 sensors
- Full screen alarms pinpoint blockage or system issues for quick resolution
- Bi-directional communication lines between sensors and modules
- System can continue to monitor sensor blockage with 1 line failure
- Three system tests (communication, power, and sensor) provide immediate feedback of system status)
- Additional rows and blockage sensors can be added later with minimal harnessing changes

Daisy Chain Blockage Detection System	
Part Number	**Description**
46798-8670	Sensor
46798-8690	Sensor Module

Daisy Chain Blockage Detection System

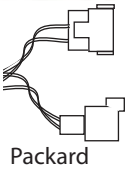
Loop A/B Harness

Module Harness ISO 1 Loop

Module Harness ISO 2 Loop

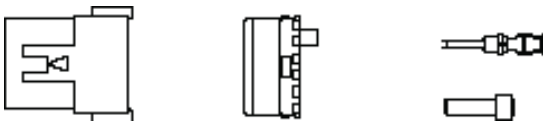
Module Extension Harness 6m or 10m

CAN Bus Adapter Harness



Daisy Chain Blockage Detection System	
Part Number	**Description**
46798-8749	Loop A/B Harness
46798-8720	Module Harness ISO 1 Loop
46798-8749	Module Harness ISO 2 Loop
46798-8741	Module Extension Harness 6 meter
46798-8740	Module Extension Harness 10 meter
46798-8761	Terminator
46798-8759	Lift Switch/Tramline Connector Kit (includes 1 Deutsch connector, 1 Deutsch wedge, 5 Deutsch terminals, and 10 Deutsch cavity plugs)
46798-8751	CAN Bus Adapter Harness with Packard connectors
46798-8752	CAN Bus Adapter Harness with fly wire leads

Terminator



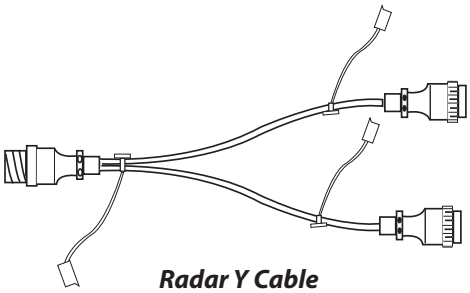
Lift Switch/Tramline Connector Kit

Lift Switch/Tramline Connector Kit Pinout	
1	12V Power
2	12V Accessory
3	Accessory Ground Out
4	Accessory Ground
5	Input 5
6	Input 7 Lift Switch
7	Input 3
8	Input 1
9	Ground Speed
10	Input 2
11	Input 4
12	Input 6

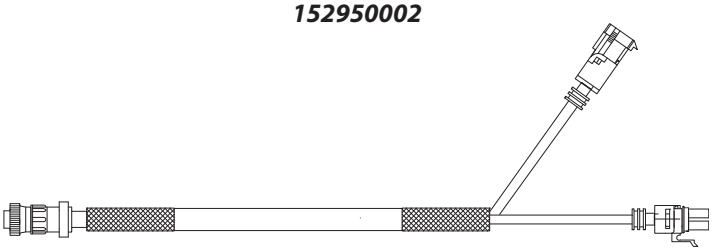
IntelliAg®

Radar Y Harnesses

Adapter Harness	
Part Number	**Description**
15295-0002	Radar Y Cable for Case Magnum 7110-8950 Series
45640-4670	Radar Y Cable for Case Maxum 5110-5240, MX90-170 Series, Steiger 9110-9390, 9210-9390 Series, Case STX 275-450 Series
45640-3030	Radar Y Cable for Caterpillar 65A, 65B, 75B Series
45640-4360S1	Radar Y Cable for 35, 45, 55, C, D, E Series
45640-2520S3	Radar Y Cable for John Deere 4xxx, 7xxx, 80xx Series
45640-2530S3	Radar Y Cable for John Deere 7600-8010T
45640-4810	Radar Y Cable for John Deere 8300 and 9400 Series

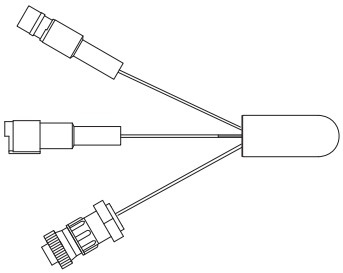


Radar Y Cable
152950002

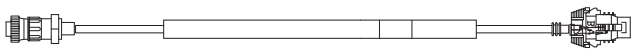


Radar Y Cable
456504670

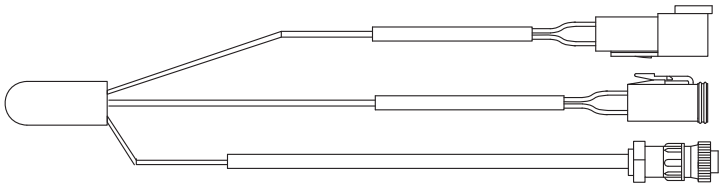
Radar Y Cable
45640253OS3



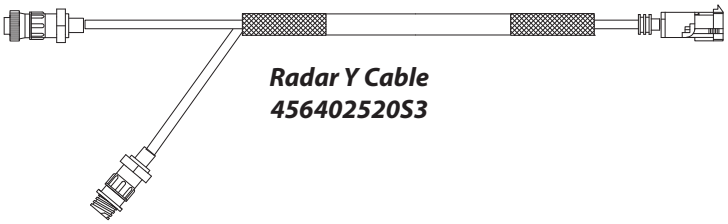
Radar Y Cable
456403030



Radar Y Cable
456504810



Radar Y Cable
45640436OS1



Radar Y Cable
45640252OS3

IntelliAg® *Monitor and Control*

Base System - Granular

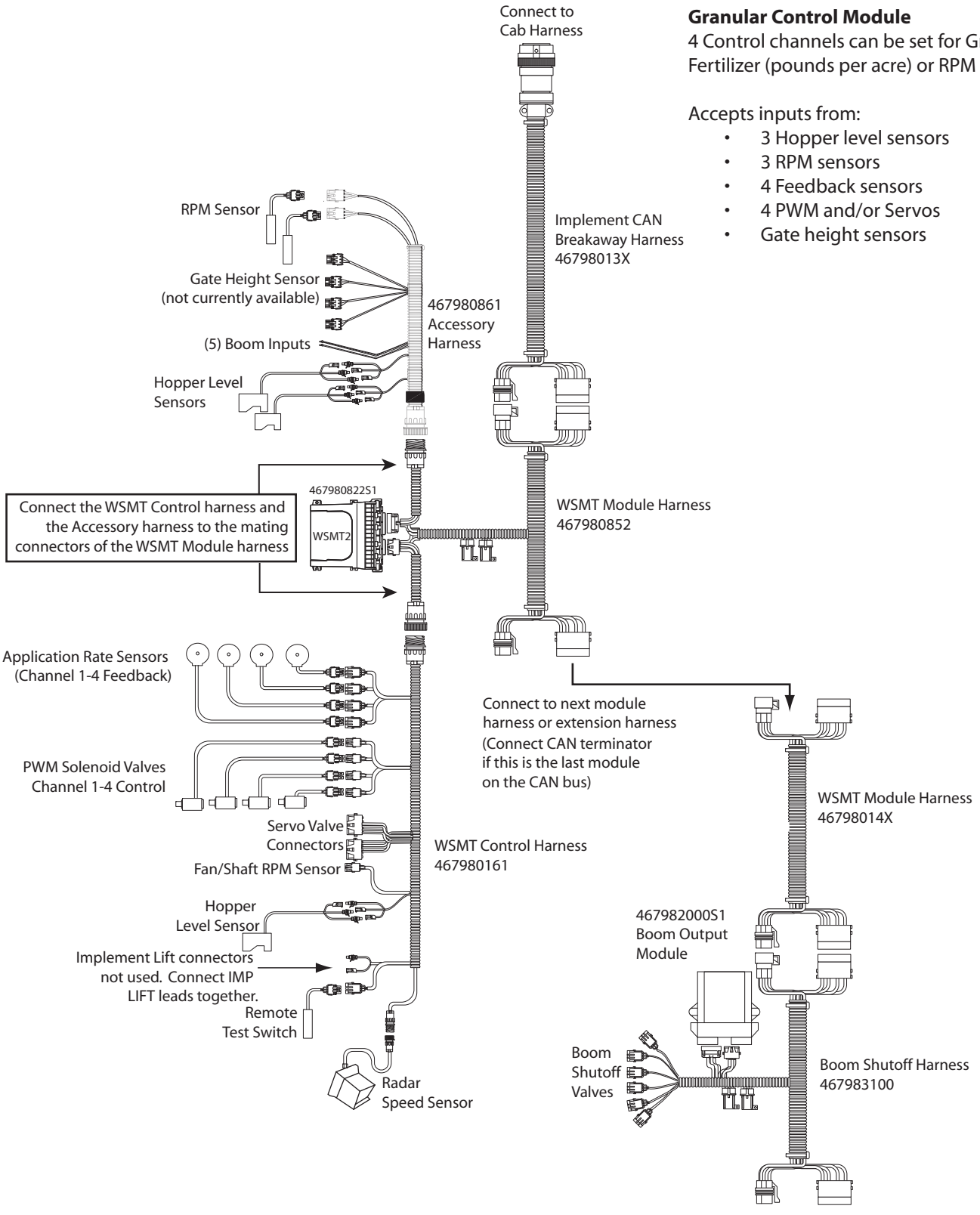
- IntelliAg Virtual Terminal AI-120 or AI-100
- Tractor harness for use with virtual terminal
- System power harness with ISO hitch connector
- ISO master switch to control on/off
- Hitch extension harness
- LIQIV - WSMT2
- WSMT2 T harness
- Control harness for connection to valves and feedback sensors

Boom Output Module

Controls boom shutoff section valves.

IntelliAg®

Spreader Control



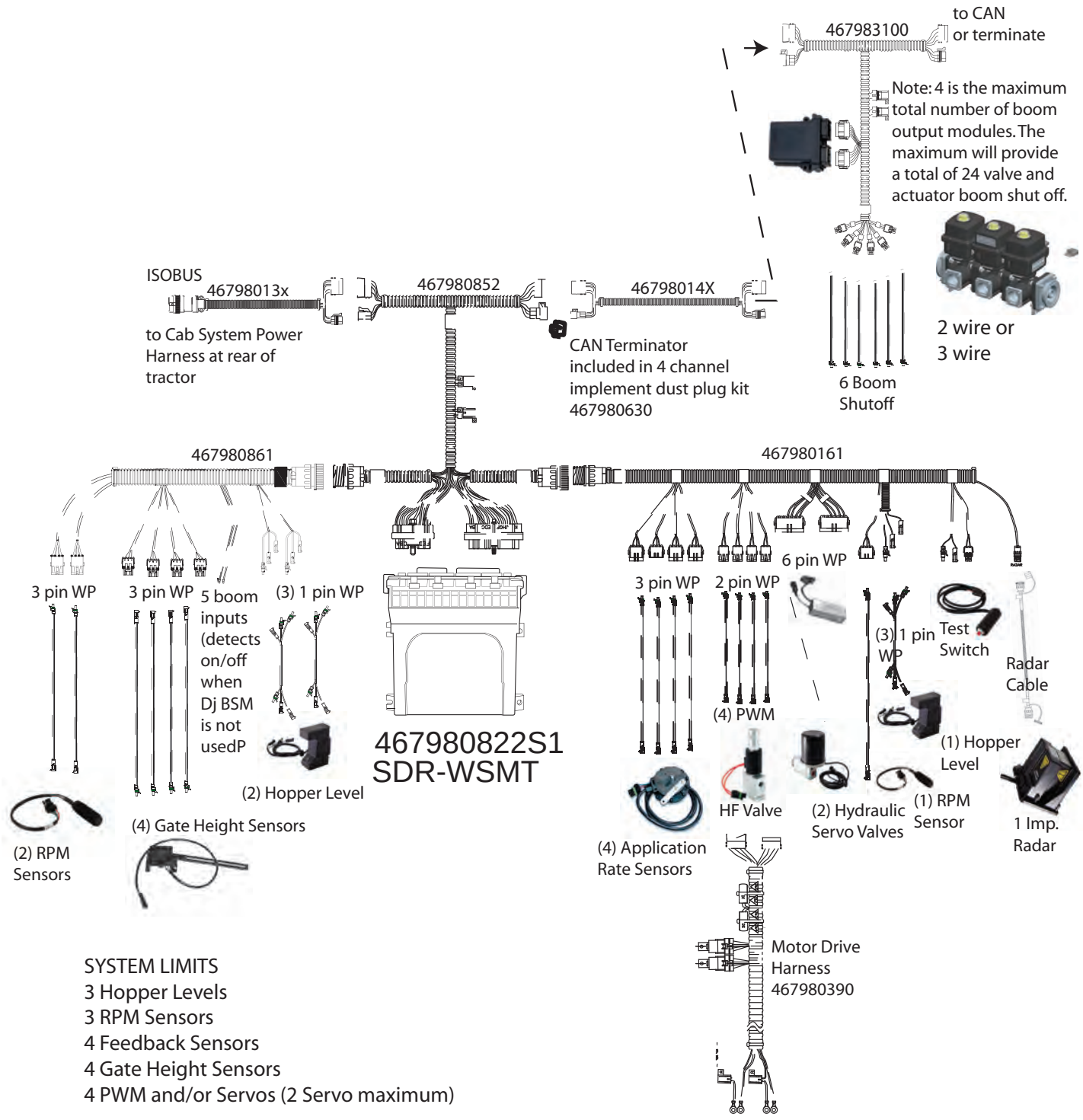
Granular Control Module
4 Control channels can be set for Granular Fertilizer (pounds per acre) or RPM control.

Accepts inputs from:

- 3 Hopper level sensors
- 3 RPM sensors
- 4 Feedback sensors
- 4 PWM and/or Servos
- Gate height sensors

Control Harnessing

-0161 Control Harness



SYSTEM LIMITS
3 Hopper Levels
3 RPM Sensors
4 Feedback Sensors
4 Gate Height Sensors
4 PWM and/or Servos (2 Servo maximum)

Hitch Extensions

Hitch Extension 6’	467980134
Hitch Extension 10‘	467980132
Hitch Extension 15’	467980136
Hitch Extension 20‘	467980131
Hitch Extension 30’	467980133
Hitch Extension 40‘	467980130
Hitch Extension 50’	467980135
CAN Extension 5‘	467980142
CAN Extension 10’	467980141
CAN Extension 20’	467980140
CAN Extension 25‘	467980143
CAN Extension 40’	467980144
CAN Extension 45‘	467980146
WSMT4 Speader Module	467980822S1
WSMT Harness	467980852
4 Ch. Imp. Dust Plug Kit w/CAN Term.	467980630
Ty Wrap Bundle 100 14”	110110099
Control Harness	467980161
Accessory Input Harness	467980861

Radar

Radar III w/ 14‘ Cable & Mtg Brkt	467831000S9
Radar Extension Cable 10’	439400024
Radar Extension Cable 15’	439400065
Radar Extension Cable 25’	439400064
Test Switch	464210515S1

RPM

Hall Effect Sensor RPM	
(Smooth)	463500030S1
(Threaded)	466970014S1
Extension Cable 3Pin WP 15’	459680922

Gate Height 1-4

Gate Height Sensor	466492370S1
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Hopper Level 1-3

Hopper Level Sensor	466820720S3
3-1Pin WP Ext. Cable 5’	466820713
3-1Pin WP Ext. Cable 10‘	466820712S1
3-1Pin WP Ext. Cable 15’	466820714
3-1Pin WP Ext. Cable 20‘	466820710S3

Pulse-Width Modulation

Hydraulic Valve Hydra Force 4 gpm	467092004S1
Hydraulic Valve Hydra Force 8 gpm	467092008S1
Hydraulic Valve Hydra Force 25 gpm	467092050S1
12 Ga. 2Pin WP Ext. Cable 15’	467980470
12 Ga. 2Pin WP Ext. Cable 20’	467980471
12 Ga. 2Pin WP Ext. Cable 30’	467980473
12 Ga. 2Pin WP Ext. Cable 40’	467980472

Servo Valves (Hydraulic)

Hydraulic Valve and Actuator 5 gpm 20’ cable	155570006
Hydraulic Valve and Actuator 9 gpm 20’ cable	155570003
Hydraulic Valve and Actuator 10 gpm 11’ cable	155570018
Hydraulic Valve and Actuator 11 gpm 20’ cable	155570021
Hydraulic Valve and Actuator 13 gpm 20’ cable	155570011
Hydraulic Valve and Actuator 16 gpm 20’ cable	155570013
Hydraulic Valve and Actuator 18 gpm 20’ cable	155570004
Hydraulic Valve and Actuator 20 gpm 20’ cable	155570016
Hydraulic Valve and Actuator 23 gpm 10’ cable	155570002
Hydraulic Valve and Actuator 25 gpm 20’ cable	155570015
Hydraulic Valve and Actuator 28 gpm 20’ cable	155570009
Hydraulic Valve and Actuator 30 gpm 10’ cable	155570007
Hydraulic Valve and Actuator 30 gpm 20’ cable	155570001
Hydraulic Valve and Actuator 30 gpm 30’ cable	155570017
Hydraulic Valve and Actuator 58 gpm 20’ cable	155570022
REQUIRED DRIVERS	
Valve Driver	464360030A
Valve Driver Extension 10’	439400026

Feedback Sensors 1-4

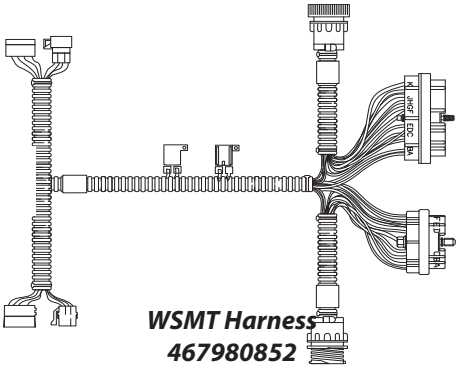
AR Sensor 360 1’ Cable	464360178S1
AR Sensor 360 5‘ Cable	464360176S1
AR Sensor 360 6’ Cable	464360179S1
AR Sensor 360 10‘ Cable	464360170S1
AR Sensor 360 15’ Cable	464360171S1
AR Sensor 360 22‘ Cable	464360177S1
AR Sensor 360 30’ Cable	464360172S1
App. Rate 1” Coupler	457141810
App. Rate 1.25” Coupler	457141850
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Electric Motor Driver

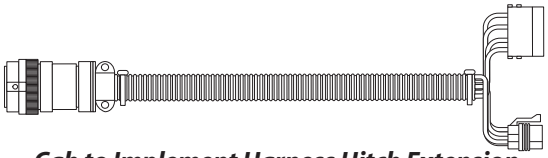
High Current Electric Motor Harness	467980490
Power Harness (High current > than 10 A)	467980390

IntelliAg®

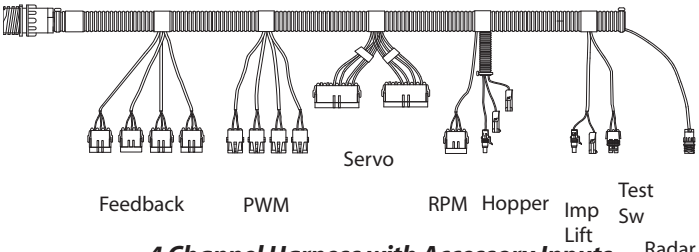
WSMT2



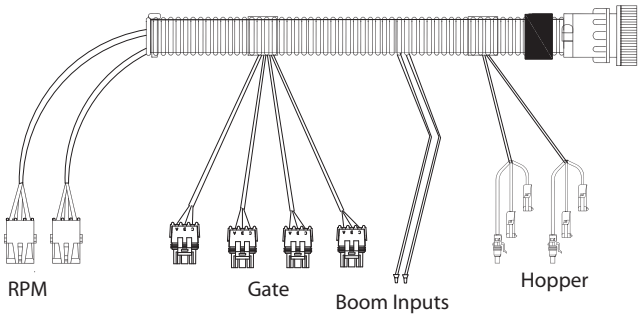
WSMT Harness
467980852



Cab to Implement Harness Hitch Extension
46798013X



4 Channel Harness with Accessory Inputs
467980161



Granular Spreader Accessory Input Harness
467980861

Working Set Master Module (WSMT2)

The Working Set Master Module (WSMT2) houses the system's primary interface device. All system parameters, constants, and memory are stored in the WSMT and controls the application of material by interfacing with proportional hydraulic valves and feedback sensors. Several WSMT modules are available for a variety of applications.

Working Set Master Module	
Part Number	**Description**
46798-0822S1	Module, SDR-WSMT2 (Spreader Control)
46798-0630	4 Channel Implement Dust Plug Kit with Terminators
11011-0099	Ty Wrap Bundle 100 14 in.

Working Set Master Harness

WSMT Harnessing	
Part Number	**Description**
46798-0852	WSMT Harness 37-pin CPCwith APER (Material Application)

NOTES:

SE style harnesses have 1 gray and 1 black 12-pin Deutsch DT connector.

Cab to Implement Harness Hitch Extension

Tractor Cab to Implement Harness Hitch Extensions	
Part Number	**Description**
46798-0134	6 ft. Hitch Extension ISO system CAN
46798-0132	10 ft. Hitch Extension ISO system CAN
46798-0136	15 ft. Hitch Extension ISO system CAN
46798-0131	20 ft. Hitch Extension ISO system CAN
46798-0133	30 ft. Hitch Extension ISO system CAN
46798-0130	40 ft. Hitch Extension ISO system CAN
46798-0135	50 ft. Hitch Extension ISO system CAN
46798-0457	40 ft. Hitch to Hitch Extension

WSMT2 Harnesses (Control Channel/Accessory Inputs)

37 pin CPC Control Harnesses	
Part Number	**Description**
46798-0161	WSMT Material Application 4 Ch Actuator Harness with APER (application error rate)
46798-0861	Granular Spreader Accessory Harness (2 RPM, 4 Gate Height, 5 Boom Inputs, 2 Hopper Level)

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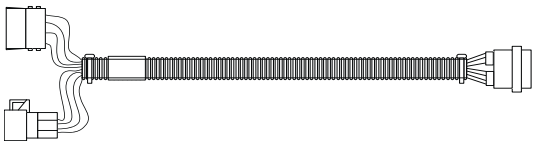
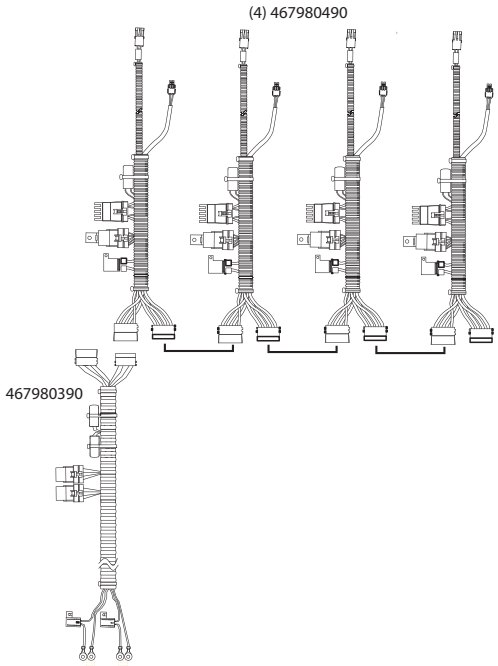


Rear Implement Hitch Harness (Deutsch)
467980360

Rear Implement Hitch Harness (IBBC) 6 ft
467980361

Rear Implement Hitch Harness (IBBC) 20 ft
467980362

Rear Implement Hitch Harness (IBBC) 25 ft
467980363



CAN Y Cable and Electric Motor Driver
467980390 and 467980490

CAN to Hitch Connector Harnesses

Harness accommodates disconnection between implement and tow-behind aircart to second hitch extension.

Rear Implement Hitch Harness	
Part Number	**Description**
46798-0360	Rear Implement Hitch Harness with Deutsch 9-pin (CAN to Hitch) 3 ft.
46798-0361	Rear Implement Hitch Harness with IBBC 9-pin (CAN to Hitch) 6 ft.
46798-0362	Rear Implement Hitch Harness with IBBC 9 pin 20 ft.
46798-0363	Rear Implement Hitch Harness with IBBC 9 pin 25 ft.

Adapter Harnesses

Adapter Harness	
Part Number	**Description**
46798-0390	CAN Y Cable (DICKEY-john, Case) (used with 46798-0490)
46798-0490	Electric Motor Driver (solenoid relay cable for high current electric motor drive)

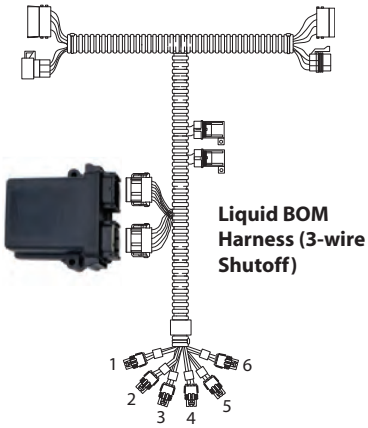
WSMB Output Module Driver

Implement

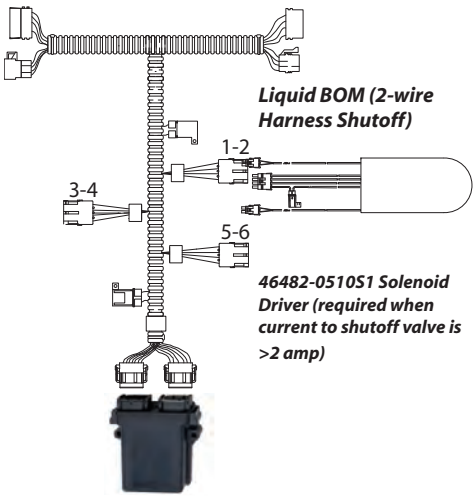
Output Shutoff Module

A WSMB Output Module Driver communicates with the Boom Switch Module for section on/off control.

Row Shutoff Parts	
Part Number	**Description**
46798-2000S1	Output Shutoff Module
46798-3100	Boom Shutoff Harness (6 Boom/3 Wire Shutoff)
46798-3101	Boom Shutoff Harness (6 Boom/2 Wire Shutoff) (used with non-DICKEY-john Valves and 464820510)
46798-2100	Row Shutoff (RSO) Harness (12 solenoid)
46482-0510S1	Solenoid Driver (plugs into 46798-3501 and -3101 for current >2 Amp)



467983100
Boom Shutoff Harness



467983101
Boom Shutoff Harness

Control Switch Module

Cab

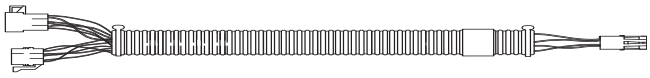
Boom Switch Module

Extended Shut Off Module

Boom Switch Module controls up to 24 boom on/off shutoff valves.

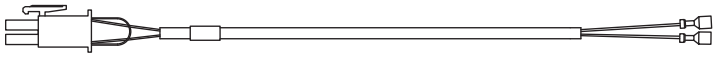
Switch modules placed in the cab allow each row/section to be controlled or use the master switch for all row/section on or off.

Boom Switch Module Parts	
Part Number	**Description**
46798-4030S1	Boom Switch Module (BSM) (1-6 sections)
46798-4040S1	Extended Shut Off Module (ESM) (7-24 row)
46798-4150	BSM/ESM Mounting Bracket (4 total) for use with 5" Virtual Terminal (AI-50)
46798-4160	BSM/ESM U-Mount Bracket (accommodates mounting 46798-4030S1)
46798-0330	BSM Harness to Tractor Harness
46798-0335	CFM to JD GS2 Cab Harness
46798-0340	BSM Harness 60 in. CAN Extension
46798-4180S1	ESM Foot Switch Cable (Liquid)
46798-0625	BSM/ESM Mounting Bracket for use with 10" Virtual Terminal (AI-100)
46798-0626	BSM/ESM Mounting Bracket for use with 12" Virtual Terminal (AI-120)

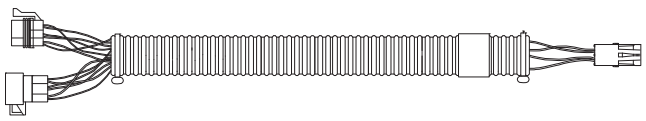


BSM Harness 24"
467980330

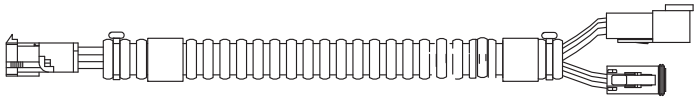
BSM CAN Harness Extension 60"
467980340



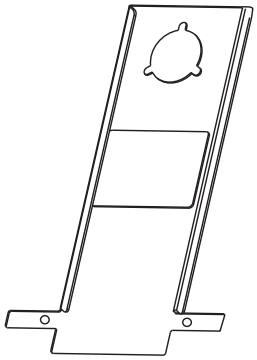
ESM Foot Switch Cable 96"
467984180



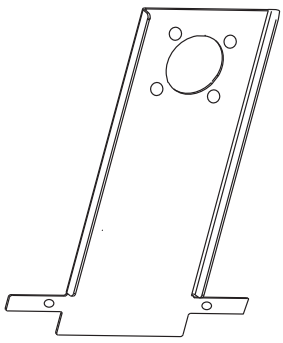
Case Tractor Cab Harness 24"
467980330



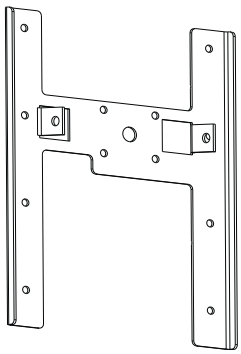
CFM to JD GS2 Cab Harness
467980335



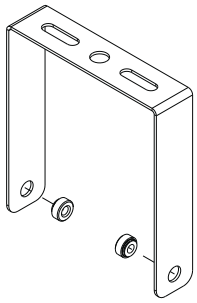
BSM/ESM Mounting Bracket
(AI-120) 467980626



BSM/ESM Mounting Bracket
(AI-100) 467980625



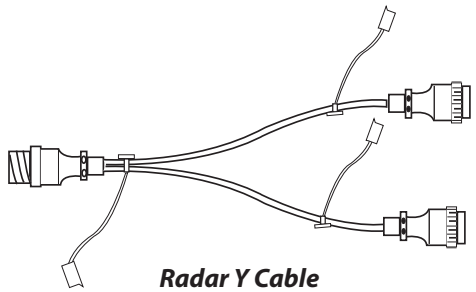
BSM/ESM Mounting Bracket
467984150



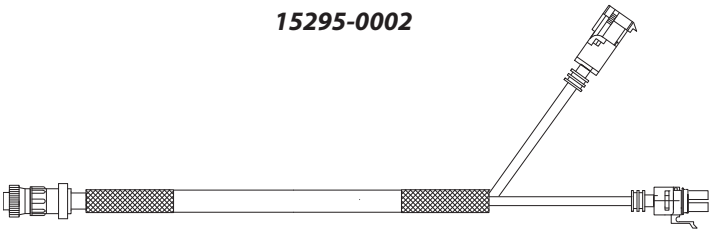
BSM U Mount Bracket
467984160

IntelliAg®

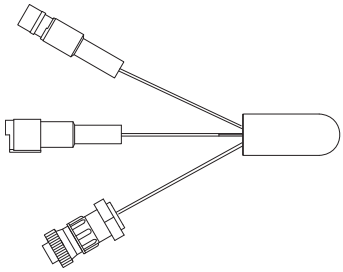
Radar Y Harnesses



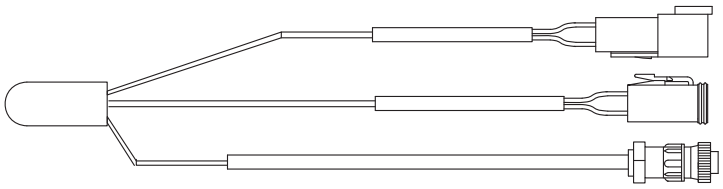
Radar Y Cable
15295-0002



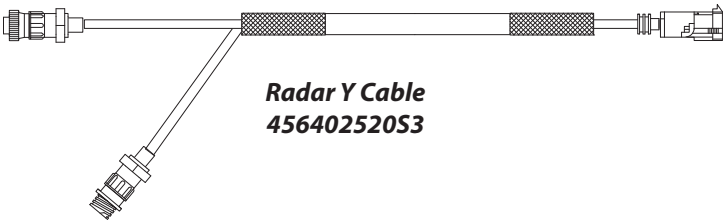
Radar Y Cable
456504670



Radar Y Cable
456403030



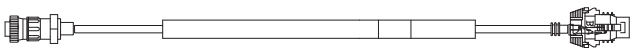
Radar Y Cable
45640360S1



Radar Y Cable
45640252OS3

Adapter Harness	
Part Number	**Description**
15295-0002	Radar Y Cable for Case Magnum 7110-8950 Series
45640-4670	Radar Y Cable for Case Maxum 5110-5240, MX90-170 Series, Steiger 9110-9390, 9210-9390 Series, Case STX 275-450 Series
45640-3030	Radar Y Cable for Caterpillar 65A, 65B, 75B Series
45640-4360S1	Radar Y Cable for 35, 45, 55, C, D, E Series
45640-2520S3	Radar Y Cable for John Deere 4xxx, 7xxx, 80xx Series
45640-2530S3	Radar Y Cable for John Deere 7600-8010T
45640-4810	Radar Y Cable for John Deere 8300 and 9400 Series

Radar Y Cable
45640253OS3



Radar Y Cable
456504810

IntelliAg®

Monitor and Control

Base System - Sprayer

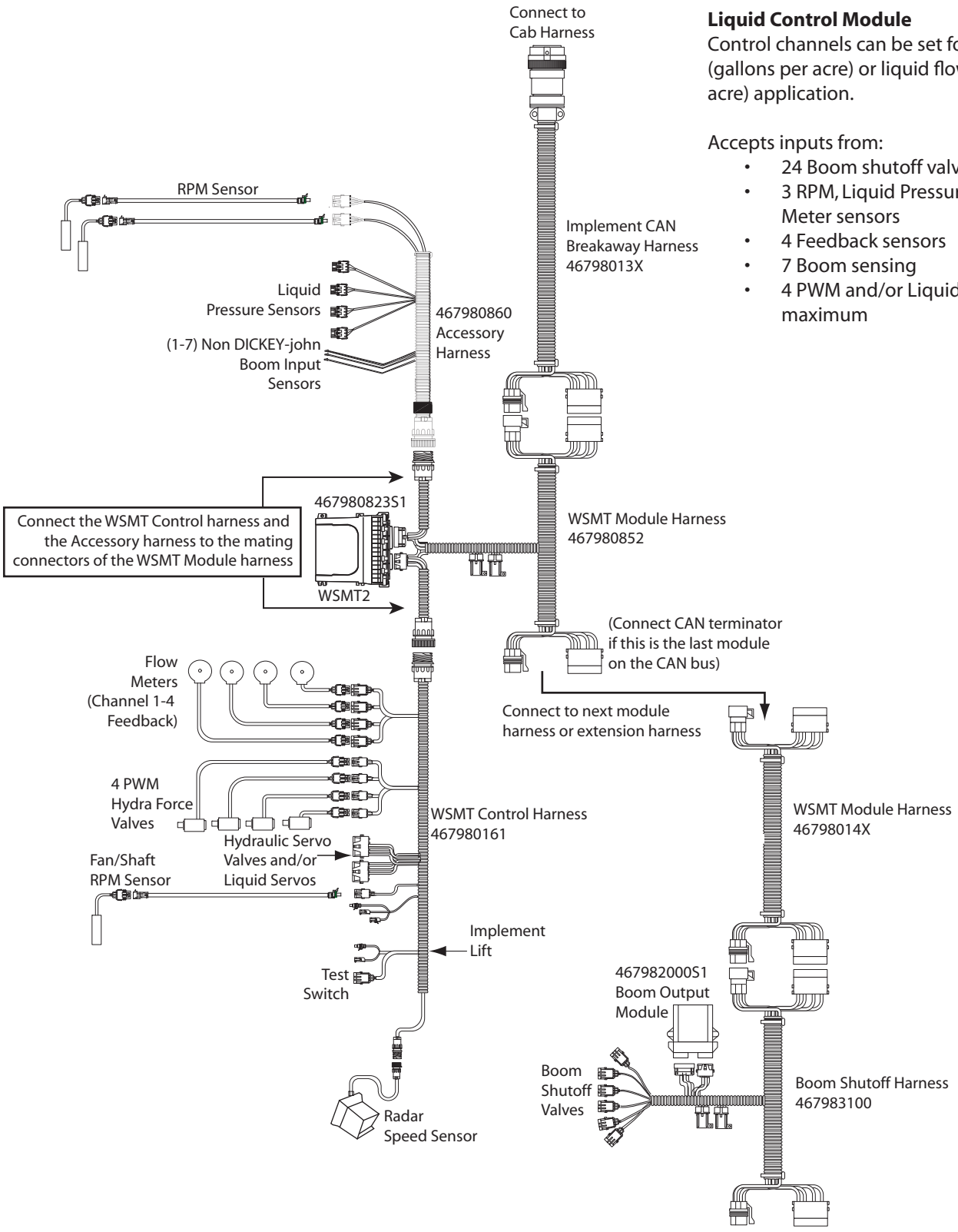
- IntelliAg Virtual Terminal AI-120 or AI-100
- Tractor harness for use with Virtual Terminal
- System power harness with ISO hitch connector
- ISO master switch to control on/off
- Hitch extension harness
- LIQIV - WSMT2
- WSMT2 T harness
- Control harness for connection to valves and feedback sensors

Boom Output Module

Controls boom shutoff section valves.

IntelliAg®

Sprayer Control



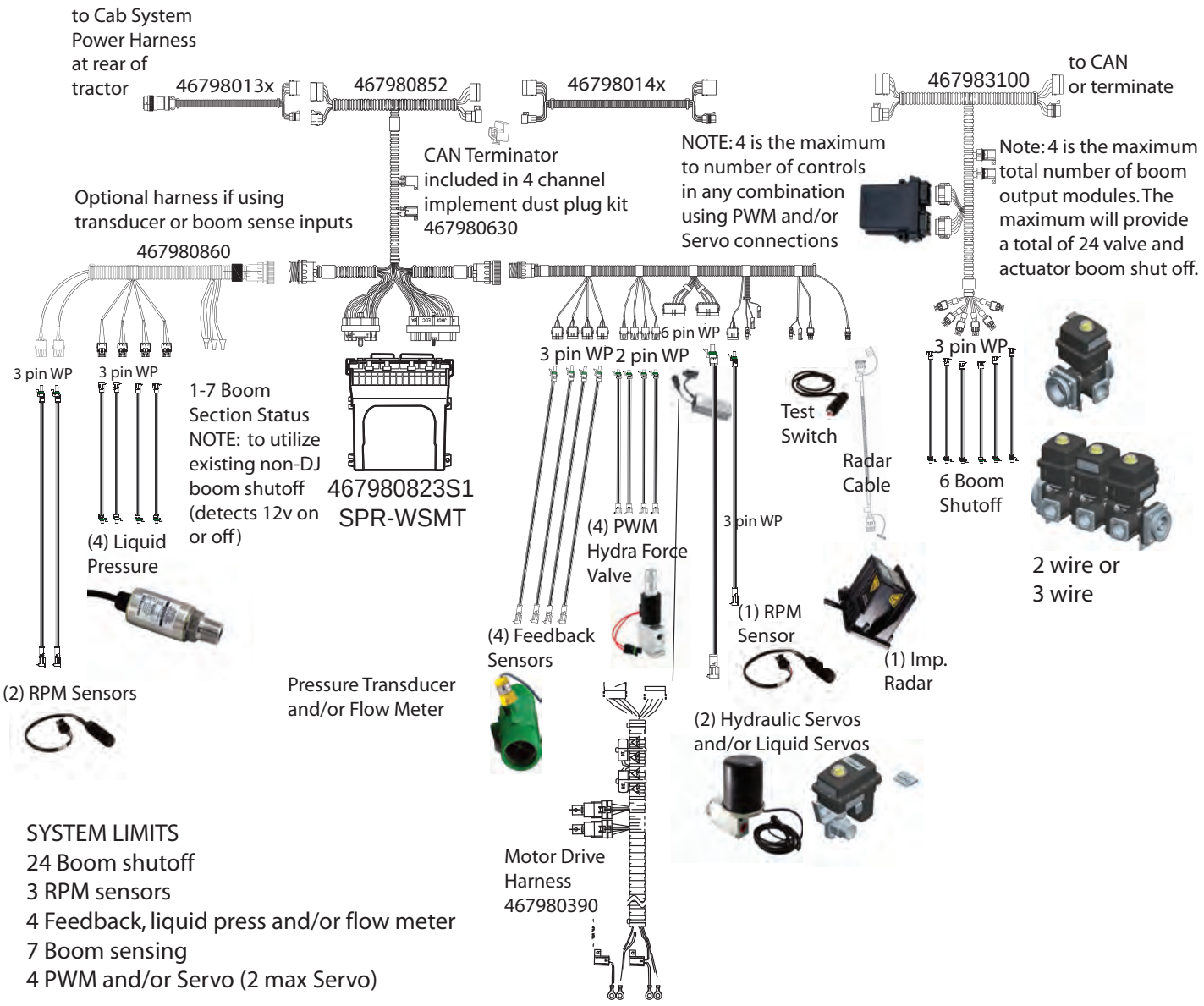
Liquid Control Module
Control channels can be set for liquid pressure (gallons per acre) or liquid flow (gallons per acre) application.

Accepts inputs from:

- 24 Boom shutoff valves
- 3 RPM, Liquid Pressure, and/or Flow Meter sensors
- 4 Feedback sensors
- 7 Boom sensing
- 4 PWM and/or Liquid Servos (2 Servo maximum

IntelliAg®

-0161 Control Harness


to Cab System Power Harness at rear of tractor
46798013x
467980852
46798014x
467983100
to CAN or terminate
CAN Terminator included in 4 channel implement dust plug kit 467980630
NOTE: 4 is the maximum to number of controls in any combination using PWM and/or Servo connections
Note: 4 is the maximum total number of boom output modules. The maximum will provide a total of 24 valve and actuator boom shut off.
Optional harness if using transducer or boom sense inputs
467980860
3 pin WP
3 pin WP
1-7 Boom Section Status NOTE: to utilize existing non-DJ boom shutoff (detects 12v on or off)
467980823S1
SPR-WSMT
3 pin WP
2 pin WP
6 pin WP
3 pin WP
6 Boom Shutoff
2 wire or 3 wire
Test Switch
Radar Cable
(4) Liquid Pressure
(4) PWM Hydra Force Valve
3 pin WP
(4) Feedback Sensors
(1) RPM Sensor
(1) Imp. Radar
(2) RPM Sensors
Pressure Transducer and/or Flow Meter
(2) Hydraulic Servos and/or Liquid Servos
Motor Drive Harness 467980390

SYSTEM LIMITS
24 Boom shutoff
3 RPM sensors
4 Feedback, liquid press and/or flow meter
7 Boom sensing
4 PWM and/or Servo (2 max Servo)

IntelliAg®

System Parts List

Hitch Extensions

Hitch Extension 6’	467980134
Hitch Extension 10‘	467980132
Hitch Extension 15’	467980136
Hitch Extension 20‘	467980131
Hitch Extension 30’	467980133
Hitch Extension 40‘	467980130
Hitch Extension 50’	467980135
CAN Extension 5‘	467980142
CAN Extension 10’	467980141
CAN Extension 20’	467980140
CAN Extension 25‘	467980143
CAN Extension 40’	467980144
CAN Extension 45‘	467980146
WSMT4 Sprayer Module	467980823S1
WSMT Harness	467980852
Control Harness	467980161
Liquid Accessory Input Harness	467980860
4 Ch. Imp. Dust Plug Kit w/CAN Term.	467980630
Ty Wrap Bundle 100 14”	110110099

Radar

Radar III w/ 14‘ Cable & Mtg Brkt	467831000S9
Radar Extension 10’	439400024
Radar Extension 15’	439400065
Radar Extension 25‘	439400064
Test Switch	464210515S1

RPM

Hall Effect Sensor RPM	
(Smooth)	463500030S1
(Threaded)	466970014S1
HES Ext. Cable 3Pin WP 15’	459680922

Pulse-Width Modulation

Hydraulic Valve Hydra Force 4 gpm	467092004S1
Hydraulic Valve Hydra Force 8 gpm	467092008S1
Hydraulic Valve Hydra Force 25 gpm	467092050S1
12 Ga. 2Pin WP Ext. Cable 15‘	467980470
12 Ga. 2Pin WP Ext. Cable 20’	467980471

Servo Valves (Hydraulic)

Hydraulic Valve and Actuator 5 gpm 20’ cable	155570006
Hydraulic Valve and Actuator 9 gpm 20’ cable	155570003
Hydraulic Valve and Actuator 10 gpm 11’ cable	155570018
Hydraulic Valve and Actuator 11 gpm 20’ cable	155570021
Hydraulic Valve and Actuator 13 gpm 20’ cable	155570011
Hydraulic Valve and Actuator 16 gpm 20’ cable	155570013
Hydraulic Valve and Actuator 18 gpm 20’ cable	155570004
Hydraulic Valve and Actuator 20 gpm 20’ cable	155570016
Hydraulic Valve and Actuator 23 gpm 10’ cable	155570002
Hydraulic Valve and Actuator 25 gpm 20’ cable	155570015
Hydraulic Valve and Actuator 28 gpm 20’ cable	155570009
Hydraulic Valve and Actuator 30 gpm 10’ cable	155570007
Hydraulic Valve and Actuator 30 gpm 20’ cable	155570001
Hydraulic Valve and Actuator 30 gpm 30’ cable	155570017
Hydraulic Valve and Actuator 58 gpm 20’ cable	155570022
REQUIRED DRIVER	
Valve Driver	464360030A
Valve Driver Extension 10’	439400026

Liquid Pressure Transducer

0-100 PSI	465700010
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Flow Meters

Flow Meter 1/2”	PM00370018S1
Flow Meter 3/4”	PM00370023S1
Flow Meter 1“	PM00370030S1
Flow Meter 1.5”	PM00370040S1
Flow Meter 2“	PM00370048S1
Flow Meter 3”	PM00370068S1
Flow Meter 4“	PM00370088S1
SS Flow Meter 1/2”	PMNPT70116S1
SS Flow Meter 3/4”	PMNPT70121S1
SS Flow Meter 1”	PMNPT70126S1
SS Flow Meter 1-1/2”	PMNPT70136S1
SS Flow Meter 2”	PMNPT70146S1
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Working Set Member

BOM (Boom Output Module)	467982000S1
BOM Harness	467983100

Liquid Valve and Actuator (liquid flow control)

Valve & Actuator Assy. 3/8” 2-Way Stainless Steel	467095010
Valve & Actuator Assy. 3/8” 3-Way Stainless Steel	467095220
Valve & Actuator Assy. 1/2” 2-Way Stainless Steel	467095020
Valve & Actuator Assy. 3/4” 2-Way Poly	467095030
Valve & Actuator Assy. 1” 2-Way Poly	467095280
Valve & Actuator Assy. 1” 2-Way Stainless Steel	467095290
Valve & Actuator Assy. 1-1/2” 3-Way Poly	467095050
Valve & Actuator Assy. 1-1/2” 3-Way Stainless Steel	467095140
Valve & Actuator Assy. 2” 2-Way Stainless Steel	467095150
Valve & Actuator Assy. 2” 3-Way Stainless Steel	467095160
Valve & Actuator Assy. 3” 2-Way Stainless Steel	467095170
6Pin WP Extension Cable 15’	457901820
6Pin WP Extension Cable 30’	457901821

Boom “Bank” Shut Off Valves

Valve & Actuator 3/4”	467096000
Valve & Actuator 3/4” 3 Bank	467096010
Valve & Actuator 3/4” 5 Bank	467096020
Valve & Actuator 1” Single	467095130
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Electric Motor Driver

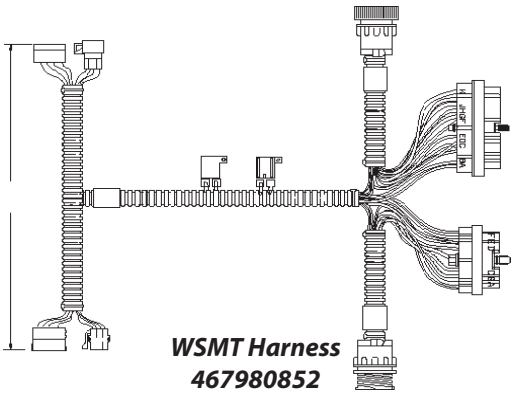
High Current Electric Motor Harness	467980490
Power Harness (High current > than 10 A	467980390

Raven Fast Valve Adapter Harness

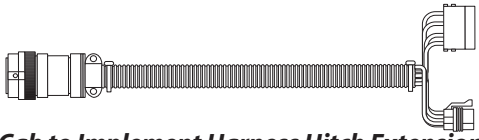
Raven Fast Valve Adapter Harness	466980100

IntelliAg®

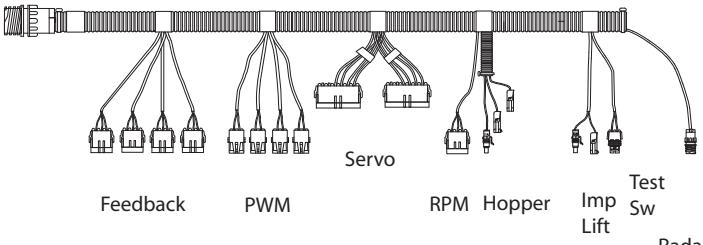
WSMT2



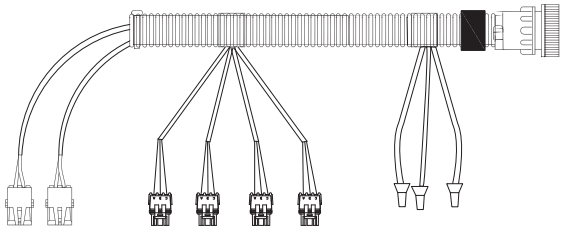
WSMT Harness
467980852



Cab to Implement Harness Hitch Extension
46798013X



Material Application Accessory Harness
467980161



Sprayer Accessory Harness
467980860

Working Set Master Module (WSMT2)

The Working Set Master Module (WSMT2) houses the system's primary interface device. All system parameters, constants, and memory are stored in the WSMT and controls the application of material by interfacing with proportional hydraulic valves and feedback sensors. Several WSMT modules are available for a variety of applications.

Working Set Master Module	
Part Number	**Description**
46798-0823S1	Module, SPR-WSMT2 (Sprayer Control)
46798-0630	4 Channel Implement Dust Plug Kit with Terminators
11011-0099	Ty Wrap Bundle 100 14 in.

Working Set Master Harness

WSMT Harnessing	
Part Number	**Description**
46798-0852	WSMT Harness with APER (Material Application)

NOTES:
SE style harnesses have 1 gray and 1 black 12-pin Deutsch DT connector

Cab to Implement Harness Hitch Extension

Tractor Cab to Implement Harness Hitch Extensions	
Part Number	**Description**
46798-0134	6 ft. Hitch Extension ISO system CAN
46798-0132	10 ft. Hitch Extension ISO system CAN
46798-0136	15 ft. Hitch Extension ISO system CAN
46798-0131	20 ft. Hitch Extension ISO system CAN
46798-0133	30 ft. Hitch Extension ISO system CAN
46798-0130	40 ft. Hitch Extension ISO system CAN
46798-0135	50 ft. Hitch Extension
46798-0457	40 ft. Hitch to Hitch Extension

WSMT2 Harnesses (Control Channels/Accessory Inputs)

37 Pin CPC Style Control Harnesses	
Part Number	**Description**
46798-0161	WSMT Material Application 4 Ch Actuator Harness with APER (application error rate)
46798-0860	Liquid Sprayer Accessory Harness (2 RPM, 4 Liquid, 7 Boom Inputs)

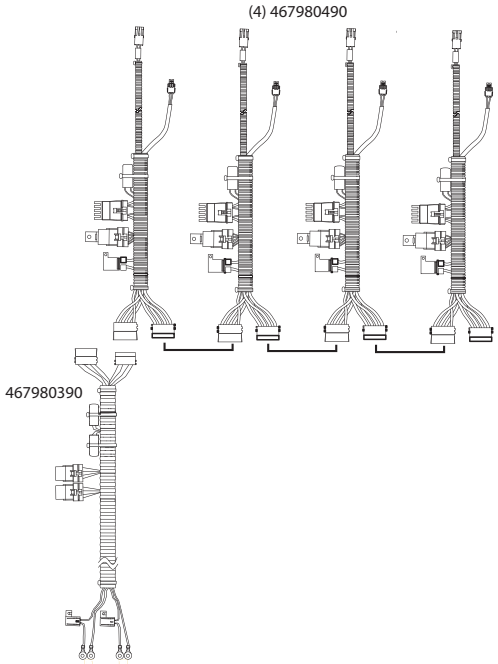
IntelliAg®

Rear Implement Hitch Harness (Deutsch) 3 ft
467980360

Rear Implement Hitch Harness (IBBC) 6 ft
467980361

Rear Implement Hitch Harness (IBBC)20 ft
467980362

Rear Implement Hitch Harness (IBBC) 25 ft
467980363



CAN Y Cable and Electric Motor Driver
467980390 and 467980490

CAN to Hitch Connector Harnesses

Harness accommodates disconnection between implement and tow-behind aircart to second hitch extension.

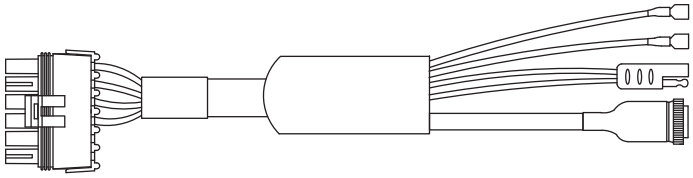
Rear Implement Hitch Harness	
Part Number	**Description**
46798-0360	Rear Implement Hitch Harness with Deutsch 9 pin (CAN to Hitch) 3 ft.
46798-0361	Rear Implement Hitch Harness with IBBC 9 pin (CAN to Hitch) 6 ft.
46798-0362	Rear Implement Hitch Harness with IBBC 9 pin 20 ft.
46798-0363	Rear Implement Hitch Harness with IBBC 9 pin 25 ft.

Adapter Harnesses

Adapter Harness	
Part Number	**Description**
46798-0490	Electric Motor Driver (solenoid relay cable for high current electric motor drive)
46798-0390	CAN Y Cable (used with 46798-0490)

Raven Fast Valve Adapter Harness

Adapter Harness	
Part Number	**Description**
46698-0100	Raven Fast Valve Adapter Harness



Raven Fast Valve Adapter Harness
466980100

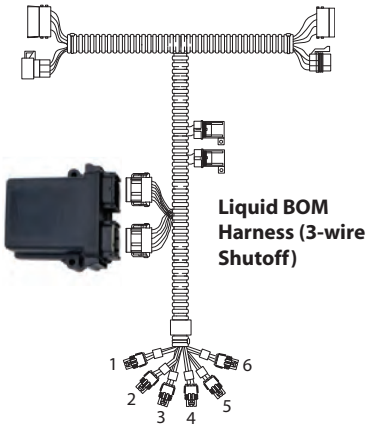
WSMB Output Module Driver

Implement

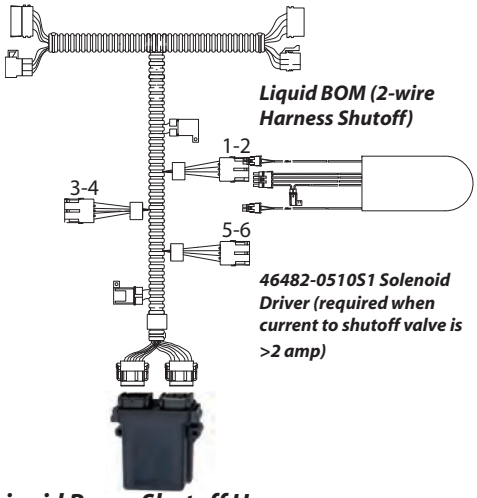
A WSMB Output Module communicates with the Boom Switch Module for application on/off control.

Output Shutoff Module

Row Shutoff Parts	
Part Number	**Description**
46798-2000S1	Output Shutoff Module
46798-3100	Liquid Boom Shutoff Harness (6 Boom/3 Wire Shutoff)
46798-3101	Liquid Boom Shutoff Harness (6 Boom/2 Wire Shutoff) (used with non-DICKEY-john Valves and 464820510)
46798-2100	Row Shutoff (RSO) Harness (12 solenoid)
46482-0510S1	Solenoid Driver (plugs into 46798-3501 and -3101 for current >2 Amp)

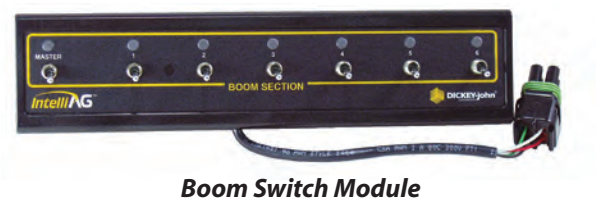


Liquid Boom Shutoff Harness
467983100



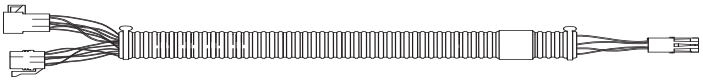
Liquid Boom Shutoff Harness
467983101

Control Switch Module

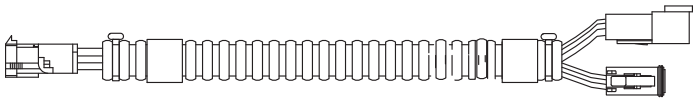


Boom Switch Module

Extended Shutoff Module



BSM Harness 24"
467980330



CFM to JD GS2 Cab Harness
467980335

BSM CAN Harness Extension 60"
467980340

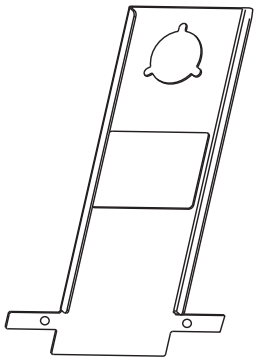
ESM Foot Switch Cable 96"
467984180

Cab

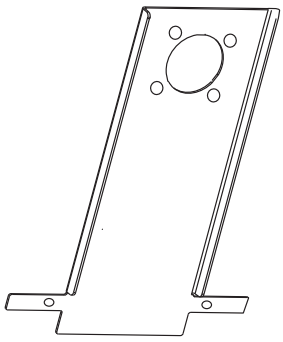
Boom Switch Module controls up to 24 boom on/off shutoff valves.

Switch modules placed in the cab allow each row/section to be controlled or use the master switch for all row/section on or off.

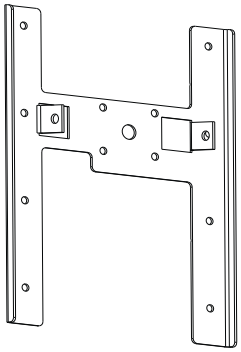
Boom Switch Module Parts	
Part Number	**Description**
46798-4030S1	Boom Switch Module (BSM) (1-6 sections)
46798-4040S1	Extended Shut Off Module (ESM) (7-24 rows)
46798-4150	BSM/ESM Mounting Bracket (4 total) for use with 5" Virtual Terminal (AI-50)
46798-4160	BSM/ESM U-Mount Bracket (accommodates mounting 46798-4030S1)
46798-0330	BSM Harness to Tractor Harness (DICKEY-john, Case)
46798-0335	CFM to JD GS2 Cab Harness
46798-0340	BSM Harness 60 in. CAN Extension
46798-4180S1	BSM Foot Switch Cable (Liquid)
46798-0625	BSM/ESM Mounting Bracket for use with 10" Virtual Terminal (AI-100)
46798-0626	BSM/ESM Mounting Bracket for use with 12" Virtual Terminal (AI-120)



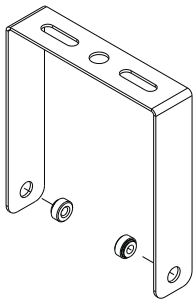
BSM/ESM Mounting Bracket
(AI-120) 467980626



BSM/ESM Mounting Bracket
(AI-100) 467980625



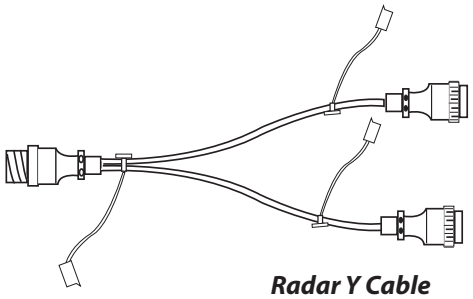
BSM/ESM Mounting Bracket
467984150



BSM U Mount Bracket
467984160

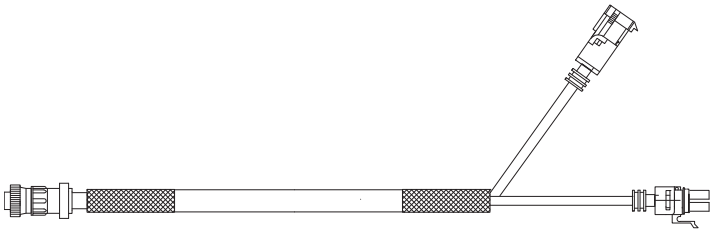
IntelliAg®

Radar Y Harnesses

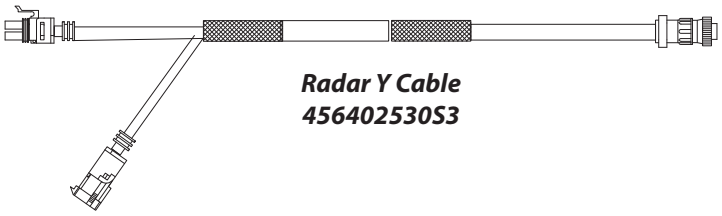


Radar Y Cable
152950002

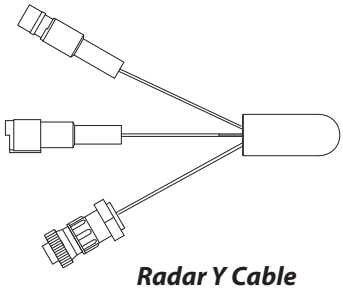
Adapter Harness	
Part Number	**Description**
15295-0002	Radar Y Cable for Case Magnum 7110-8950 Series
45640-4670	Radar Y Cable for Case Maxum 5110-5240, MX90-170 Series, Steiger 9110-9390, 9210-9390 Series, Case STX 275-450 Series
45640-3030	Radar Y Cable for Caterpillar 65A, 65B, 75B Series
45640-4360S1	Radar Y Cable for 35, 45, 55, C, D, E Series
45640-2520S3	Radar Y Cable for John Deere 4xxx, 7xxx, 80xx Series
45640-2530S3	Radar Y Cable for John Deere 7600-8010T
45640-4810	Radar Y Cable for John Deere 8300 and 9400 Series



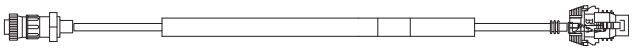
Radar Y Cable
456504670



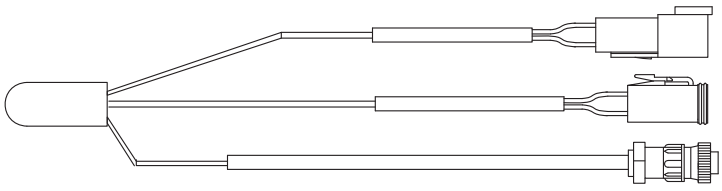
Radar Y Cable
45640253OS3



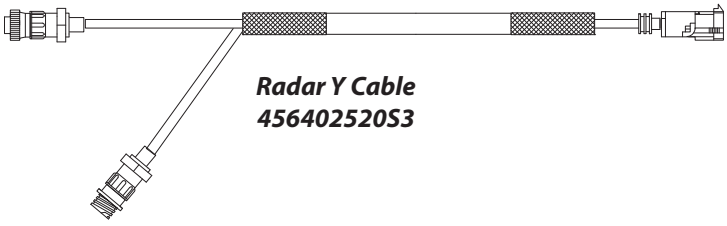
Radar Y Cable
456403030



Radar Y Cable
456504810



Radar Y Cable
45640436OS1



Radar Y Cable
45640252OS3

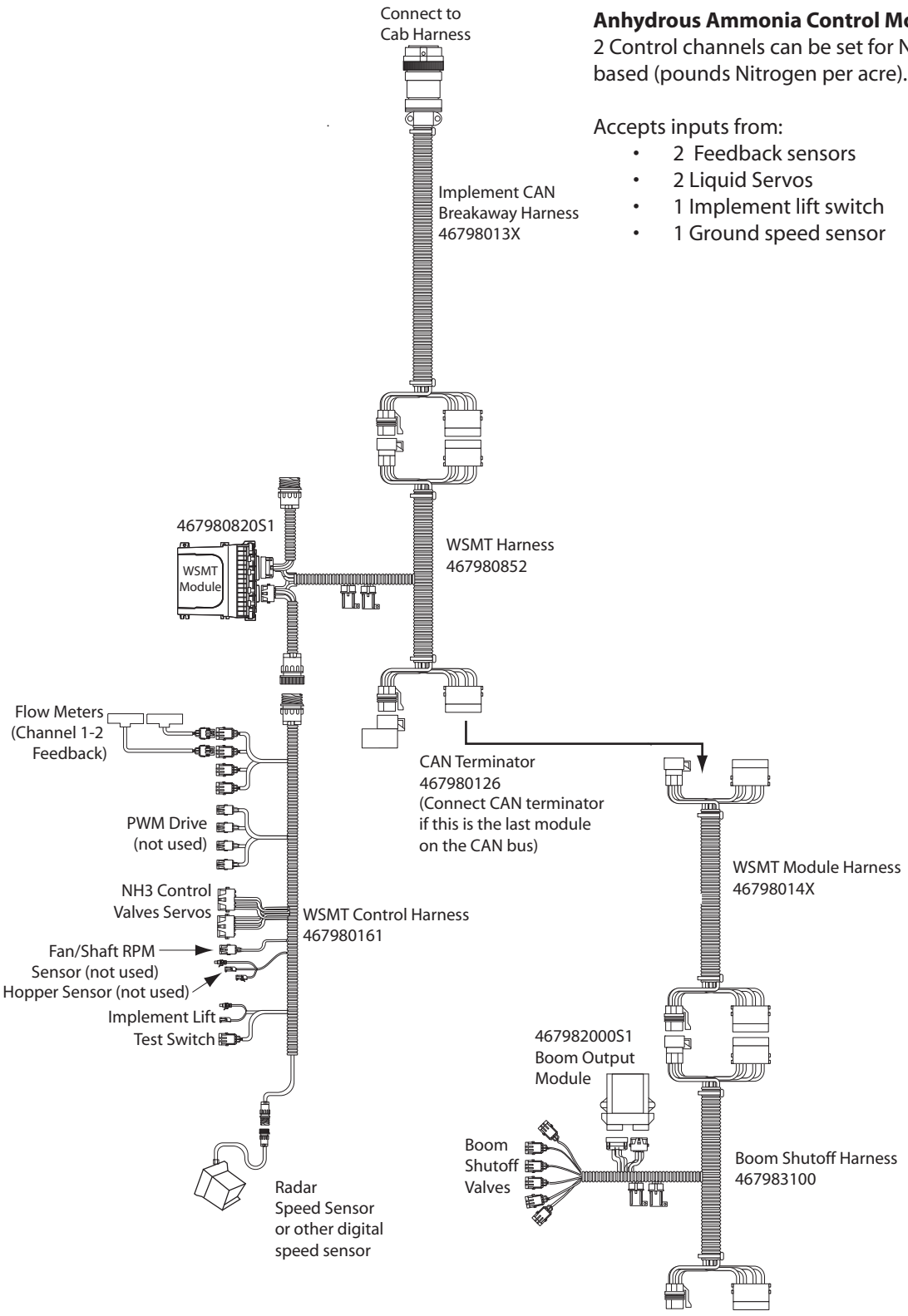
IntelliAg® *Monitor and Control*

Base System - Anhydrous

- IntelliAg Virtual Terminal AI-120 or AI-100
- Tractor harness for use with Virtual Terminal
- System power harness with ISO hitch connector
- ISO master switch to control on/off
- Hitch extension harness
- NH3- WSMT2
- WSMT2 T harness
- Control harness for connection to valves and feedback sensors

IntelliAg®

Anhydrous Control



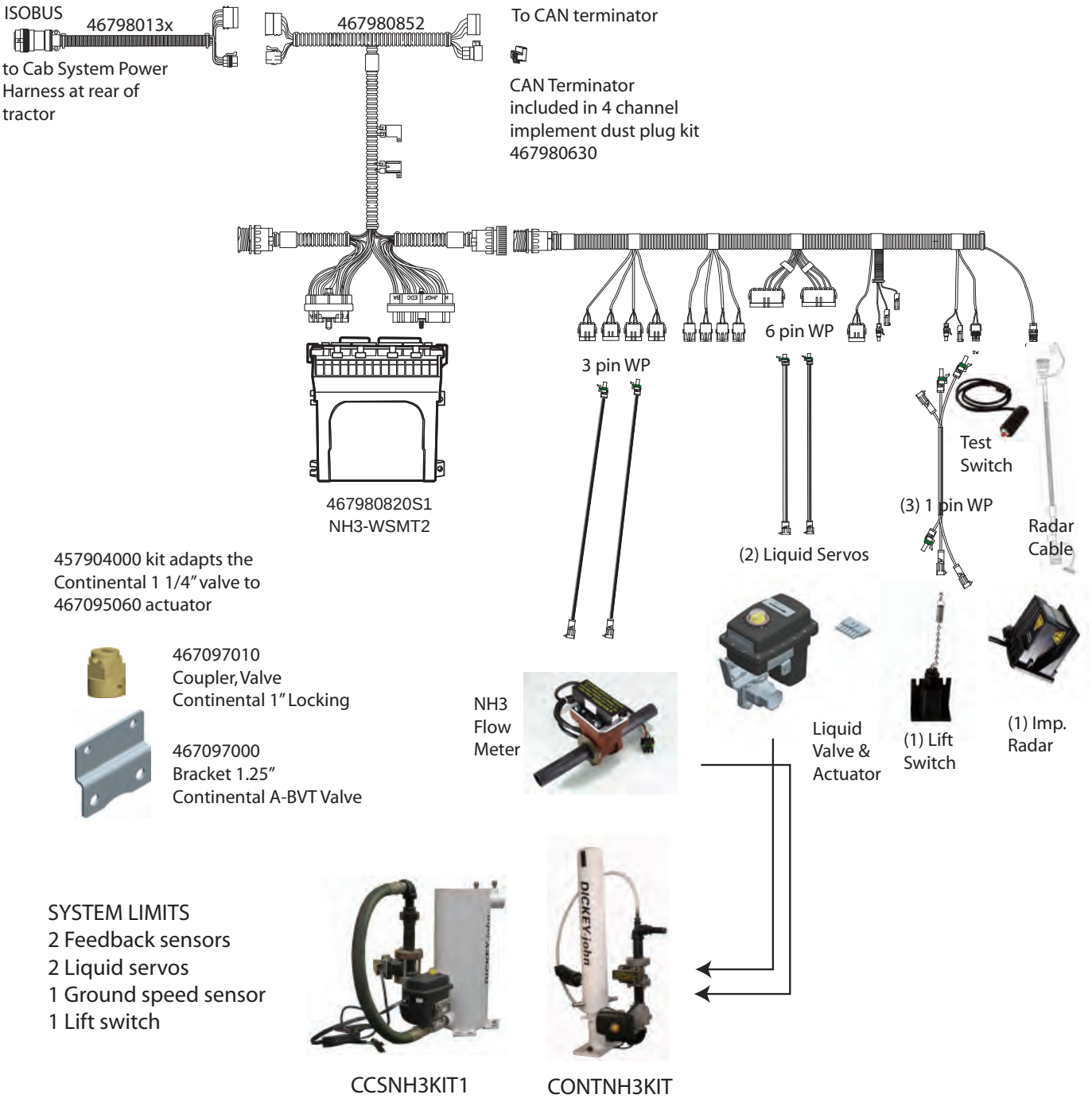
Anhydrous Ammonia Control Module
2 Control channels can be set for NH3 control/flow based (pounds Nitrogen per acre).

Accepts inputs from:

- 2 Feedback sensors
- 2 Liquid Servos
- 1 Implement lift switch
- 1 Ground speed sensor

Control Harnessing

-0161 Control Harness



IntelliAg®

System Parts List

HITCH EXTENSIONS

Hitch Extension 6’	467980134
Hitch Extension 10‘	467980132
Hitch Extension 15’	467980136
Hitch Extension 20‘	467980131
Hitch Extension 30’	467980133
Hitch Extension 40‘	467980130
Hitch Extension 50’	467980135

CAN Extension 5‘	467980142
CAN Extension 10’	467980141
CAN Extension 20’	467980140
CAN Extension 25‘	467980143
CAN Extension 40’	467980144
CAN Extension 45‘	467980146

WSMT	467980820S1
WSMT Harness	467980852
4 Ch. Imp. Dust Plug Kit w/Terminator	467980630
Ty Wrap Bundle 100 14”	1100110099
Anhydrous Ammonia Ctrl User Manual	110011466
Control Harness	467980161

Lift Switch and Radar

Implement Lift Switch	463720150S1
Lift Switch - Whisker Type	464820520S1
3-1Pin WP Ext. Cable 5’	466820713
3-1Pin WP Ext. Cable 10‘	466820712S1
3-1Pin WP Ext. Cable 15’	466820714
3-1Pin WP Ext. Cable 20‘	466820710S3
Radar III w/ 14‘ Cable & Mtg Brkt	467831000S9
Radar Extension 10’	439400024
Radar Extension 15’	439400065
Radar Extension 25‘	439400064
Test Switch	464210515S1

Anhydrous Kits

NH3 Kit TTU 3/4” (4200 lbs/hr)	CCSNH3KIT
NH3 Kit TTU 1” (5500 lbs/hr)	CCSNH3KIT1
NH3 Kit Continental 1-1/4” (9600 lbs/hr)	CONTNH3KIT
Continental 1-1/4“ Actuator Adaptor Kit	457904000

Section Shut Off

NH# 3/4” Shut Off Valve	467096040

Flow Meter Extensions

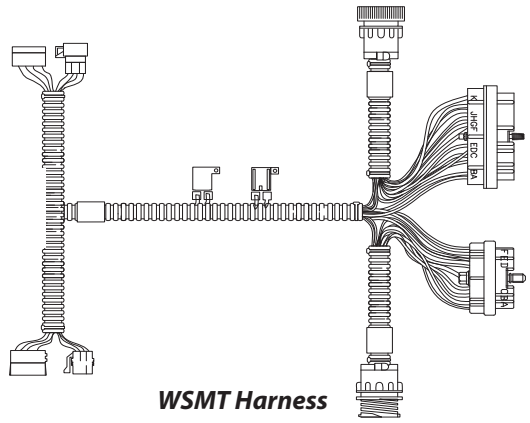
3Pin WP Ext. Cable 15’	457901810
3Pin WP Ext. Cable 30’	457901811
3Pin WP Ext. Cable 45’	457901812

Actuator Extensions

6Pin WP Extension Cable 15’	457901820
6Pin WP Extension Cable 30’	457901821

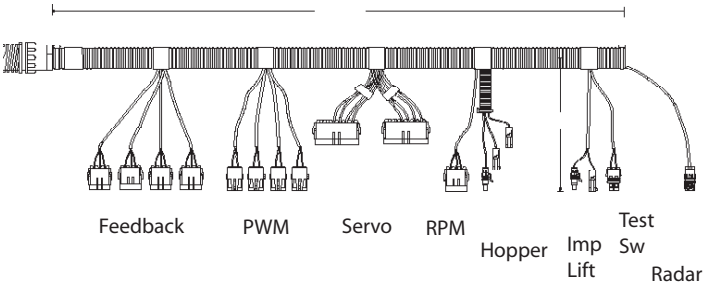
IntelliAg®

WSMT2



WSMT Harness
467980852

Cab to Implement Harness Hitch Extension
46798013X



Control Harness
467980161

Working Set Master Module (WSMT2)

The Working Set Master Module (WSMT2) houses the system's primary interface device. All system parameters, constants, and memory are stored in the WSMT and controls the application of material by interfacing with proportional hydraulic valves and feedback sensors.

Working Set Master Module	
Part Number	**Description**
46798-0820S1	Module, NH3-WSMT2 (Anhydrous Ammonia Control)
46798-0630	4 Channel Implement Dust Plug Kit with Terminators
11011-0099	Ty Wrap Bundle 100 14 in.

Working Set Master Harness

WSMT Harnessing	
Part Number	**Description**
46798-0852	WSMT Harness 37 pin CPC connector with APER

Cab to Implement Harness Hitch Extension

Tractor Cab to Implement Harness Hitch Extensions	
Part Number	**Description**
46798-0134	6 ft. Hitch Extension ISO system CAN
46798-0132	10 ft. Hitch Extension ISO system CAN
46798-0136	15 ft. Hitch Extension ISO system CAN
46798-0131	20 ft. Hitch Extension ISO system CAN
46798-0133	30 ft. Hitch Extension ISO system CAN
46798-0130	40 ft. Hitch Extension ISO system CAN
46798-0135	50 ft. Hitch Extension
46798-0457	40 ft. Hitch to Hitch Extension

WSMT2 Harnesses (Control Channel/Accessory Inputs)

37 pin CPC Control Harnesses	
Part Number	**Description**
46798-0161	WSMT Material Application 4 Ch Actuator Harness with APER (application error rate)

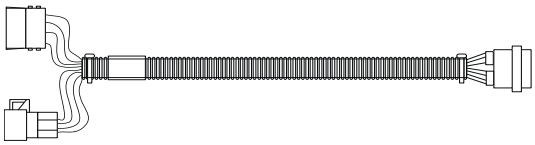
Implement Kit

IANH3IMPKIT Anhydrous Ammonia Control Implement Kit Includes	
Part Number	**Description**
46798-0820S1	Module, NH3-WSMT2 (Anhydrous Ammonia Control)
46798-0852	WSMT Harness 37 pin CPC connector with APER (Material Application)
46798-0161	Control Harness
46798-0630	4 Channel Implement Dust Plug Kit with Terminators
11001-1466	Operator's Manual

IntelliAg® Harnessing

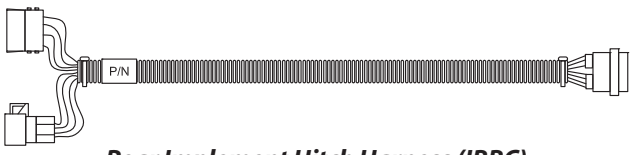
CAN to Hitch

Harness accommodates disconnection between implement and tow-behind aircart to second hitch extension.

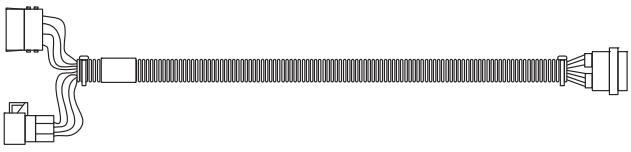


Rear Implement Hitch Harness (Deutsch)
467980360

Rear Implement Hitch Harness (IBBC)
467980361



Rear Implement Hitch Harness (IBBC)
467980362



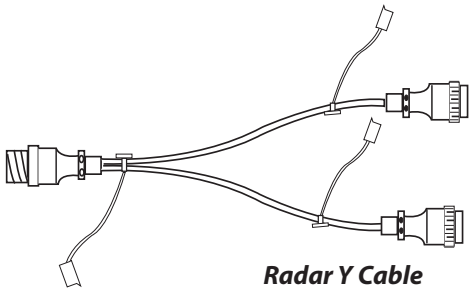
Rear Implement Hitch Harness (IBBC)
467980363

Rear Implement Hitch Harness	
Part Number	**Description**
46798-0360	Rear Implement Hitch Harness with Deutsch 9-pin (CAN to Hitch) 3 ft.
46798-0361	Rear Implement Hitch Harness with IBBC 9-pin (CAN to Hitch) 6 ft.
46798-0362	Rear Implement Hitch Harness with IBBC 9 pin 20 ft.
46798-0363	Rear Implement Hitch Harness with IBBC 9 pin 25 ft.

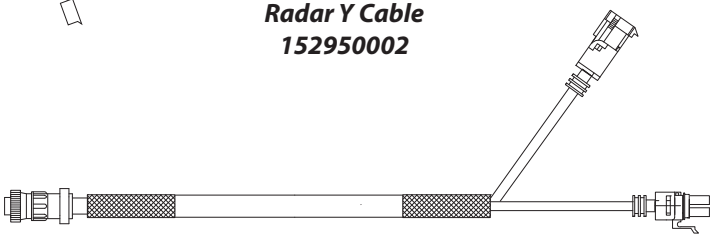
IntelliAg® Harnessing

Radar Y

Adapter Harness	
Part Number	**Description**
15295-0002	Radar Y Cable for Case Magnum 7110-8950 Series
45640-4670	Radar Y Cable for Case Maxum 5110-5240, MX90-170 Series, Steiger 9110-9390, 9210-9390 Series, Case STX 275-450 Series
45640-3030	Radar Y Cable for Caterpillar 65A, 65B, 75B Series
45640-4360S1	Radar Y Cable for 35, 45, 55, C, D, E Series
45640-2520S3	Radar Y Cable for John Deere 4xxx, 7xxx, 80xx Series
45640-2530S3	Radar Y Cable for John Deere 7600-8010T
45640-4810	Radar Y Cable for John Deere 8300 and 9400 Series

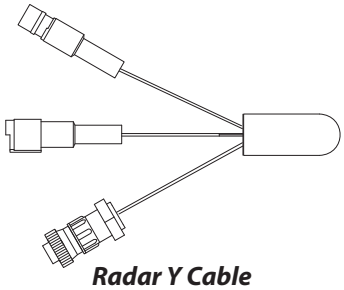


Radar Y Cable
152950002

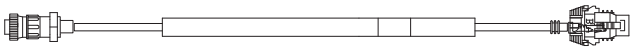


Radar Y Cable
456404670

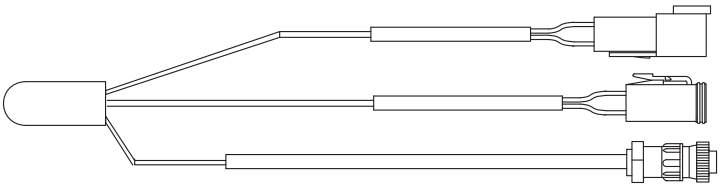
Radar Y Cable
45640253OS3



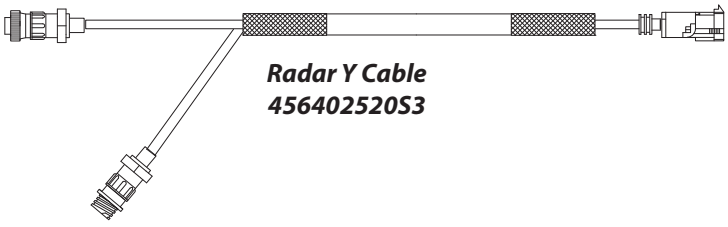
Radar Y Cable
456403030



Radar Y Cable
456404810



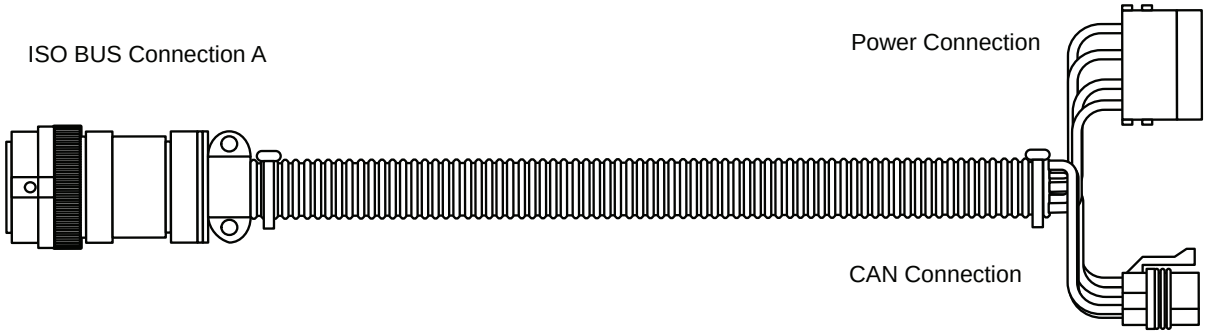
Radar Y Cable
45640436OS1



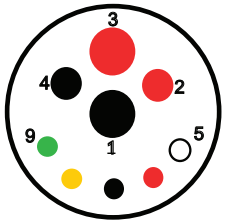
Radar Y Cable
45640252OS3

IntelliAg® Harnessing

Hitch and CAN Harness
P/N 46798013X, 46798014X, 4679836X



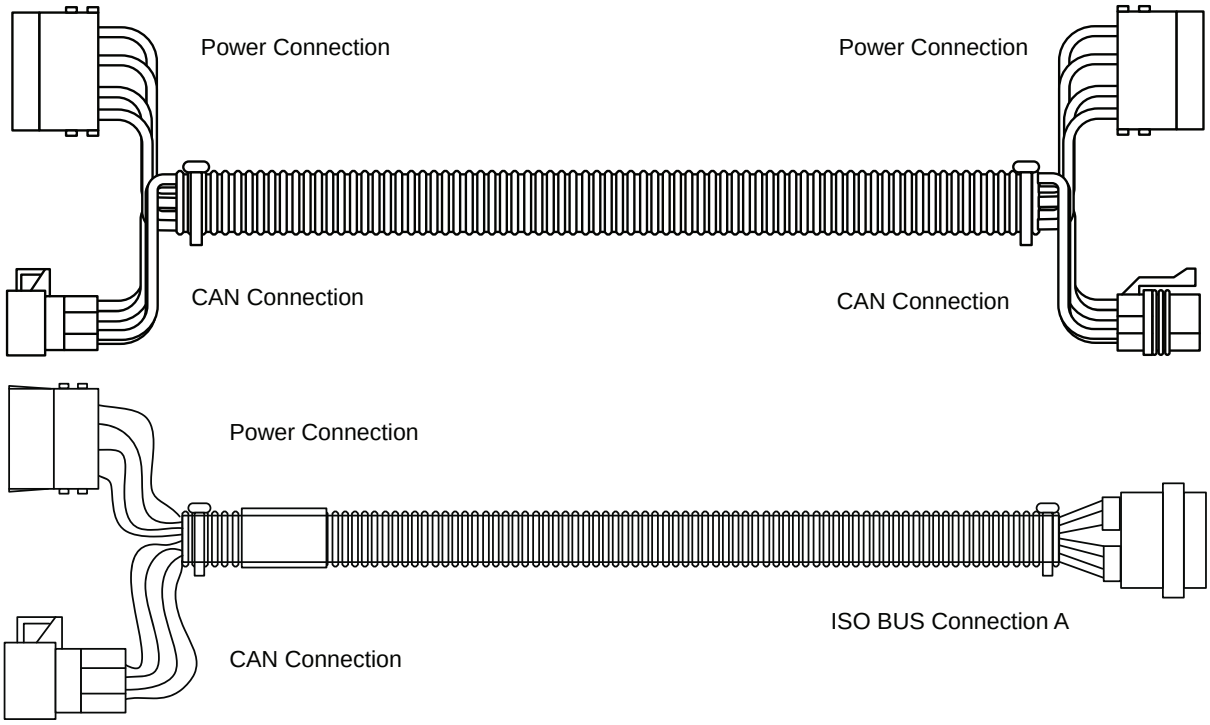
ISO BUS Connection A



Pin	Function CONN A
1	Sol Ground
2	Power +12V
3	Sol Power +12V
4	Ground
5	
6	CAN Power +12V
7	CAN Ground
8	Signal High ~+2.6v
9	Signal Low ~+2.6v

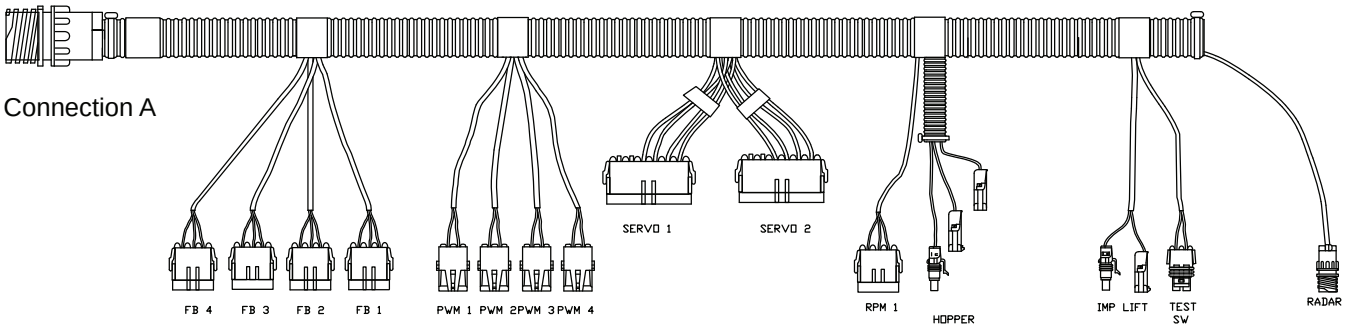
Pin	Function PWR CONN
A	Sol Power +12V
B	Sol Ground
C	Power +12V
D	Ground

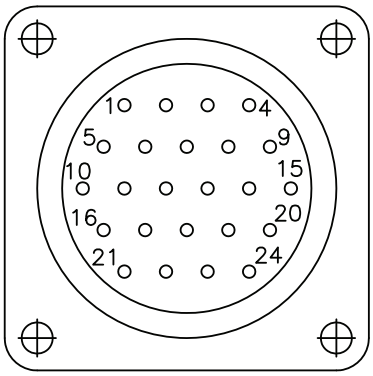
Pin	Function CAN CONN
A	
B	CAN Power +12V
C	
D	CAN Ground
E	Signal High ~+2.6v
F	Signal Low ~+2.6v



IntelliAg® Harnessing

Control Harness P/N 467980160





MATING SIDE VIEW

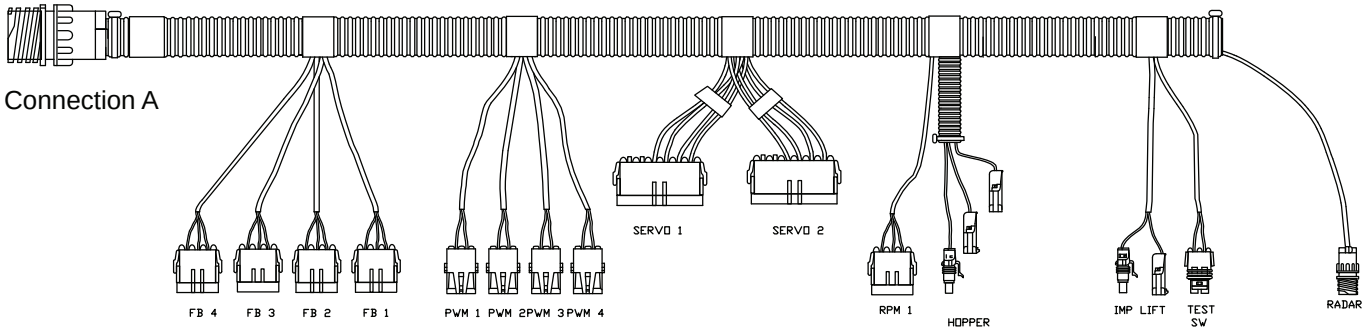
Pin	Function CONN A
1	Sol Ground
2	Sol Power+12V
3	+8V Supply
4	PWM 1
5	PWM 2
6	PWM 3
7	Servo 1 (relay 1)
8	Servo 1 (relay 2)
9	Servo 2 (relay 3)
10	Servo 2 (relay 4)
11	PWM 4
12	Feedback 1 Signal
13	Feedback 2 Signal
14	Feedback 3 Signal
15	RPM 1 Signal
16	Hopper 1 Signal
17	Ground Speed Signal
18	Feedback 4 Signal
19	ECU Power +12V
20	ECU Ground
21	Implement Lift
22	
23	
24	

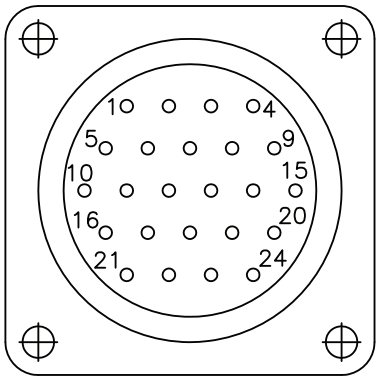
Pin	Function SERVO 1
A	Sol Power+12V
B	Sol Ground
C	Servo 1 (relay 1)
D	Servo 1 (relay 2)
E	
F	

Pin	Function SERVO 2
A	Sol Power+12V
B	Sol Ground
C	Servo 2 (relay 3)
D	Servo 2 (relay 4)
E	
F	

IntelliAg® Harnessing

Control Harness P/N 467980161





MATING SIDE VIEW

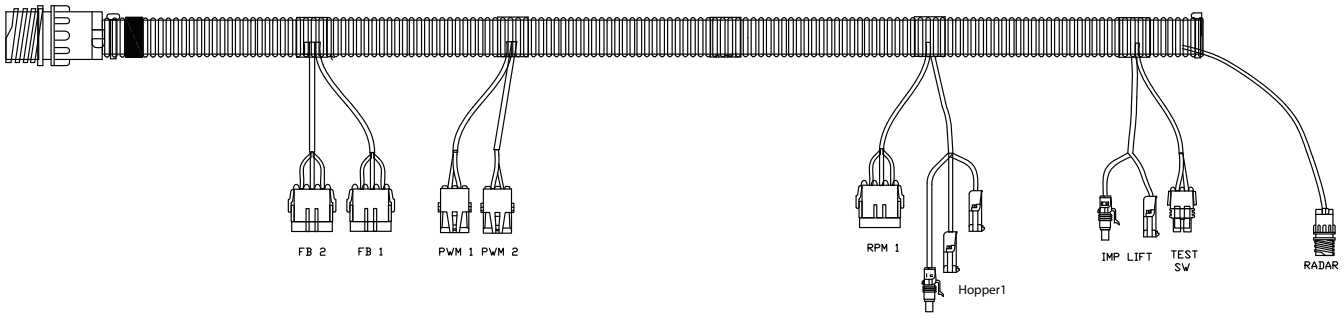
Pin	Function CONN A
1	Sol Ground
2	Sol Power+12V
3	+8V Supply
4	PWM 1
5	PWM 2
6	PWM 3
7	Servo 1 (relay 1)
8	Servo 1 (relay 2)
9	Servo 2 (relay 3)
10	Servo 2 (relay 4)
11	PWM 4
12	Feedback 1 Signal
13	Feedback 2 Signal
14	Feedback 3 Signal
15	RPM 1 Signal
16	Hopper 1 Signal
17	Ground Speed Signal
18	Feedback 4 Signal
19	ECU Power +12V
20	ECU Ground
21	Implement Lift
22	Servo 1 (DIG IN #11)
23	Servo 1 (DIG IN #16)
24	

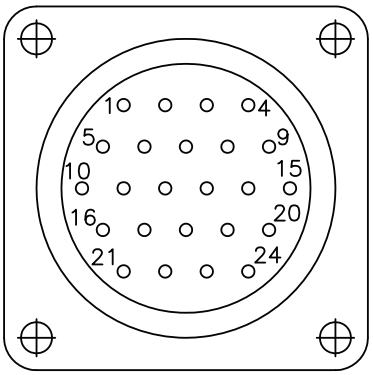
Pin	Function SERVO 1
A	Sol Power+12V
B	Sol Ground
C	Servo 1 (relay 1)
D	Servo 1 (relay 2)
E	Servo 1 (DIG IN #11)
F	

Pin	Function SERVO 2
A	Sol Power+12V
B	Sol Ground
C	Servo 2 (relay 3)
D	Servo 2 (relay 4)
E	Servo 2 (DIG IN #16)
F	

IntelliAg® Harnessing

Control Harness 2 Ch P/N 467980162



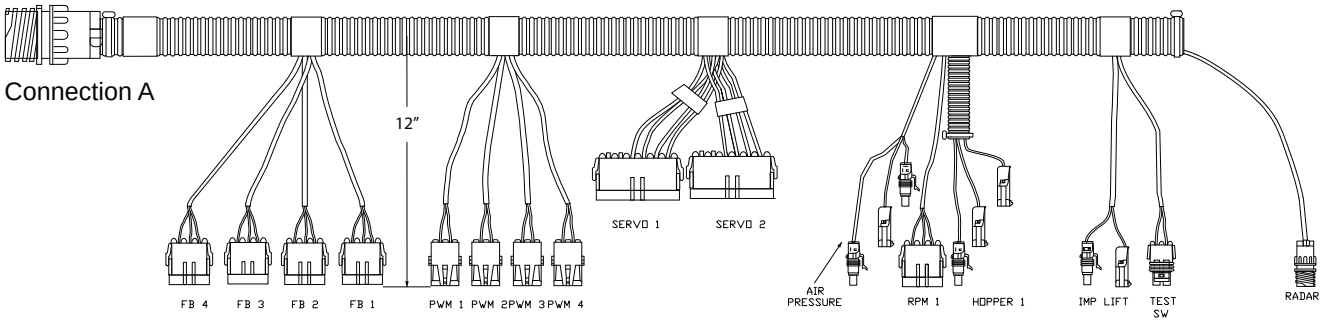


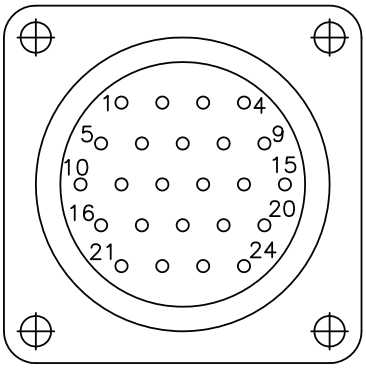
MATING SIDE VIEW

Pin	Function CONN A
1	
2	Power+12V PWM
3	+8V Supply
4	PWM 1
5	PWM 2
6	
7	
8	
9	
10	
11	
12	Feedback 1 Signal
13	Feedback 2 Signal
14	
15	RPM
16	Hopper 1 Signal
17	Ground Speed Signal
18	
19	Power +12V
20	Ground
21	Implement Lift
22	
23	
24	

IntelliAg® Harnessing

Control Harness P/N 467980164





MATING SIDE VIEW

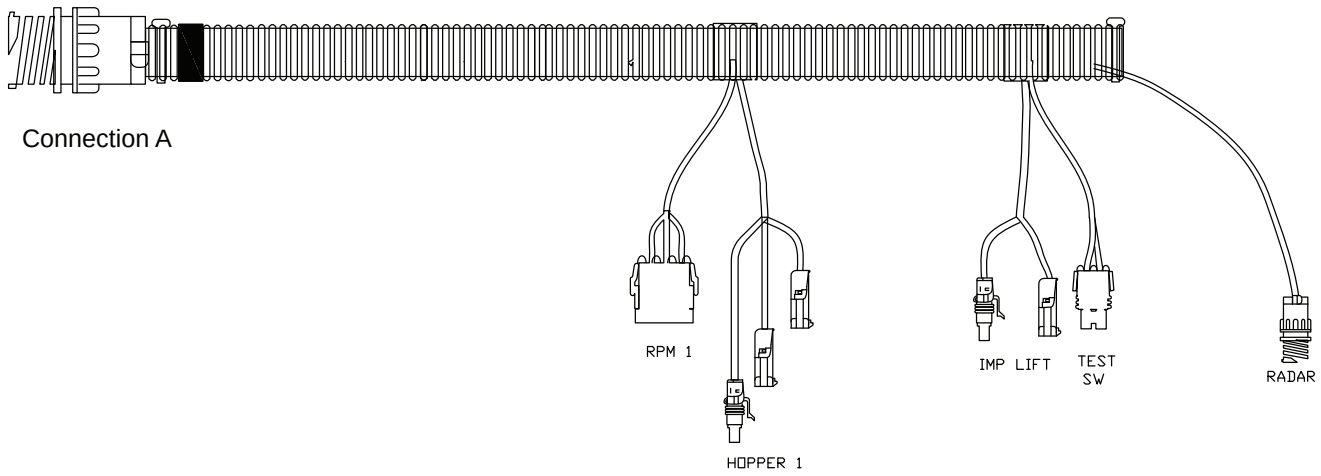
Pin	Function CONN A
1	Sol Ground
2	Sol Power+12V
3	+8V Supply
4	PWM 1
5	PWM 2
6	PWM 3
7	Servo 1 (OPEN)
8	Servo 1 (CLOSE)
9	Servo 2 (OPEN)
10	Servo 2 (CLOSE)
11	PWM 4
12	Feedback 1 Signal
13	Feedback 2 Signal
14	Feedback 3 Signal
15	RPM / Pressure Signal 1
16	Hopper 1 Signal
17	Ground Speed Signal
18	Feedback 4 Signal
19	ECU Power +12V
20	ECU Ground
21	Implement Lift
22	APER 1
23	APER 2
24	

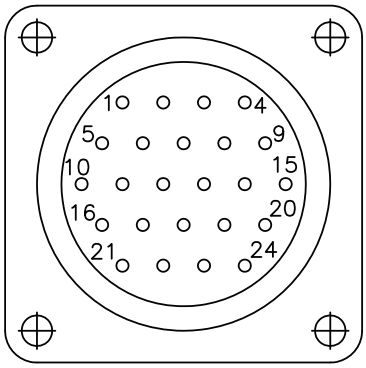
Pin	Function SERVO 1
A	Sol Power+12V
B	Sol Ground
C	Servo 1 (relay 1)
D	Servo 1 (relay 2)
E	APER 1
F	

Pin	Function SERVO 2
A	Sol Power+12V
B	Sol Ground
C	Servo 2 (relay 3)
D	Servo 2 (relay 4)
E	APER 2
F	

IntelliAg® Harnessing

Control Harness (Monitor Only) P/N 467980165



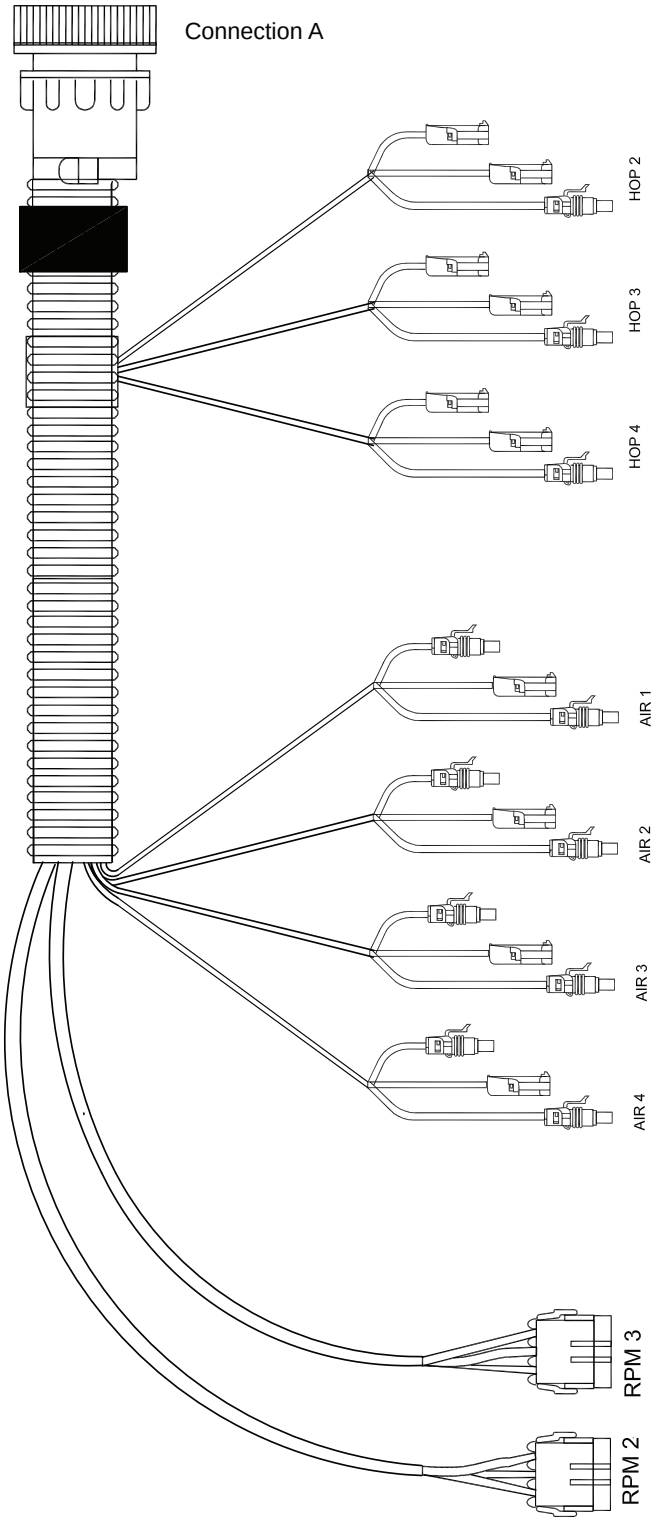


MATING SIDE VIEW

Pin	Function CONN A
1	
2	
3	+8V Supply
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	RPM Signal
16	Hopper 1 Signal
17	Ground Speed Signal
18	
19	Power +12V
20	Ground
21	Implement Lift
22	
23	
24	

IntelliAg® Harnessing

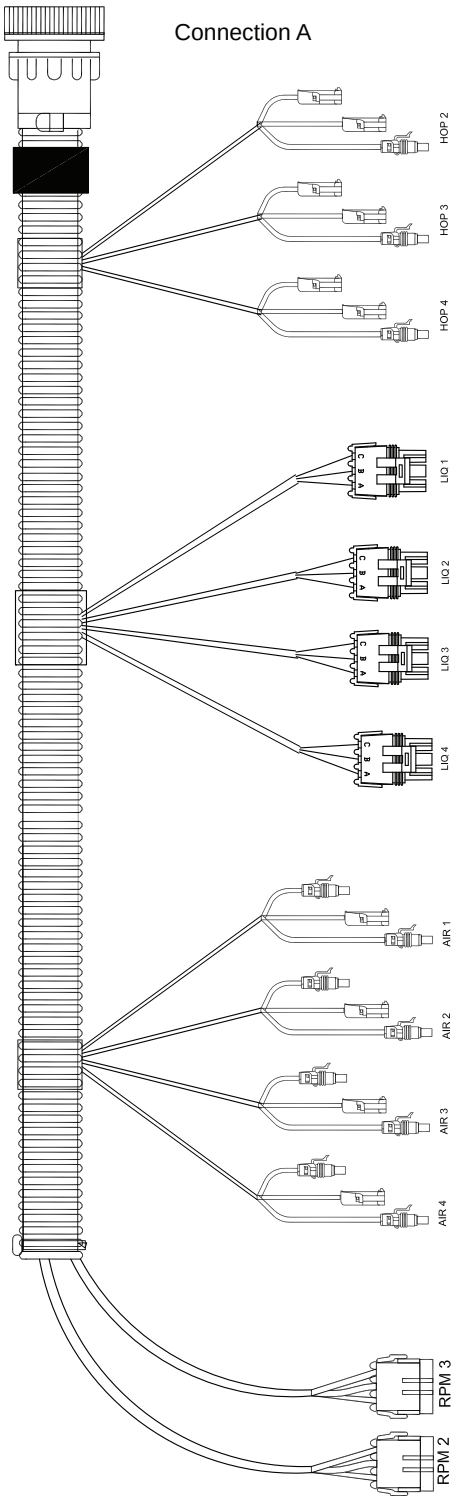
Accessory Harness P/N 467980201



Pin	Function CONN A
1	RPM 2
2	RPM 3
3	Hopper 2
4	Hopper 3
5	Hopper 4
6	
7	Air Pressure 1
8	Air Pressure 2
9	Air Pressure 3
10	Air Pressure 4
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	Power Air 1-4 +12V
25	Power Hopper 2-4 +8V
26	Ground Air & RPM
27	Ground Hopper 2-4
28	
29	
30	
31	
32	
33	
34	Power RPM +12V
35	
36	
37	

IntelliAg® Harnessing

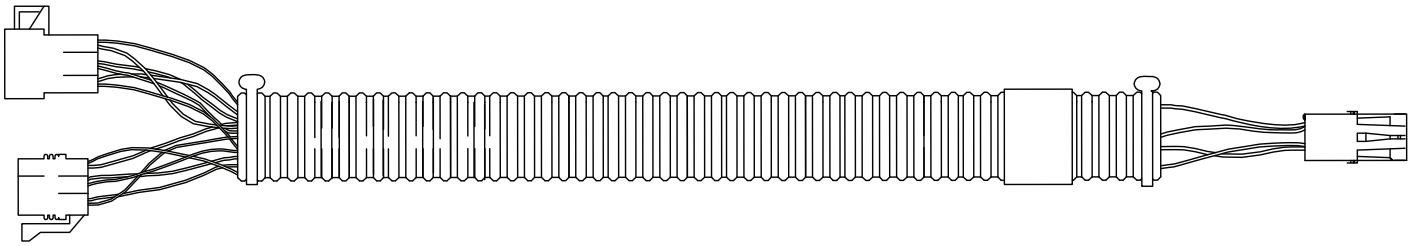
Accessory Harness P/N 467980202



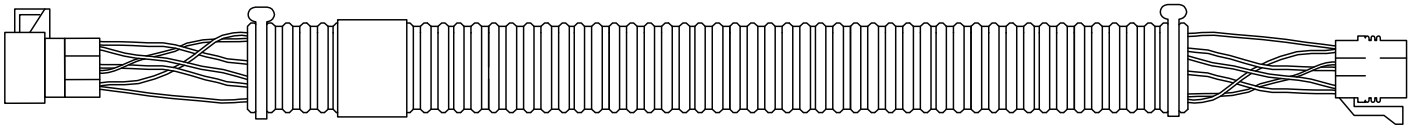
Pin	Function CONN A
1	RPM 2
2	RPM 3
3	Hopper 2
4	Hopper 3
5	Hopper 4
6	
7	Air Pressure 1
8	Air Pressure 2
9	Air Pressure 3
10	Air Pressure 4
11	
12	
13	Liquid 1
14	Liquid 2
15	Liquid 3
16	Liquid 4
17	
18	
19	
20	
21	
22	
23	
24	Power Air 1-4 +12V
25	Power Hopper 2-4 +8V
26	Ground Air & RPM
27	Ground Hopper & Liquid
28	
29	
30	
31	
32	
33	
34	Power Liquid & RPM +12V
35	
36	
37	

IntelliAg® Harnessing

BSM/ESM Harness
P/N 467980330, 467980340



467980330

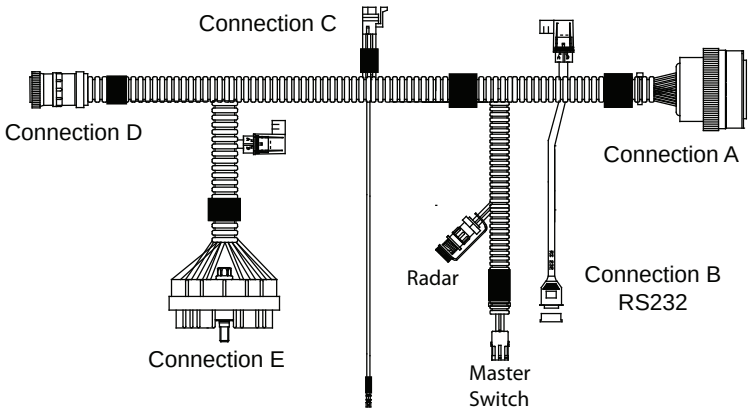


467980340

Color	Function
Red	Power+12V
Black	Ground
Yellow	Signal High ~+2.6v
Green	Signal Low ~+2.6v

IntelliAg® Harnessing

Cab Harness P/N 467980451A



Pin	Function CONN C
A	ECU Power
B	CAN Power
C	ECU Ground
D	CAN Ground
E	CAN High
F	CAN Low

Pin	Function CONN E
A1	ECU Power
A2	Solenoid Power
A3	
B1	Solenoid Ground
B2	ECU Ground
B3	ECU Ground
C1	Master Switch
C2	
C3	ECU Relay
D1	Solenoid Relay
D2	Radar Signal
D3	
E1	
E2	
E3	
F1	
F2	
F3	
G1	
G2	
G3	CAN Signal High
H1	CAN Signal Low
H2	
H3	
J1	
J2	
J3	
K1	Continuous Power
K2	
K3	Ignition

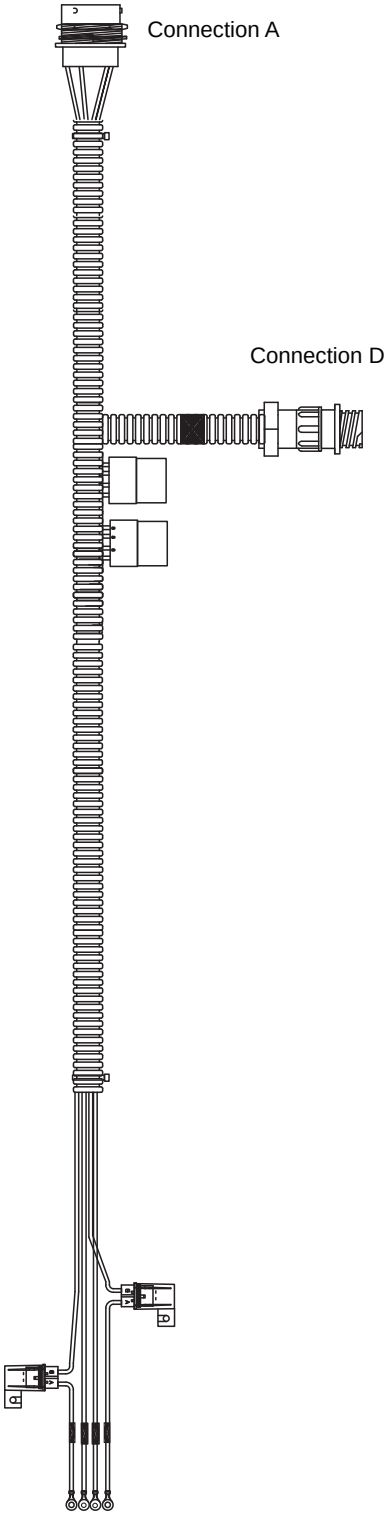
Pin	Function CONN B
1	
2	TXD Transmitted Data
3	RXD Received Data
4	
5	Signal Ground
6	
7	CTS Clear to Send
8	RTS Request to Send
9	

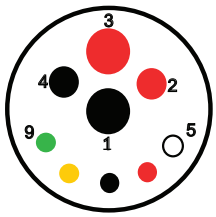
Pin	Function CONN D
1	ECU Relay
2	ECU Power
3	Continuous Power
4	Solenoid Relay
5	ECU Ground
6	Boom Control Power
7	Boom Control Ground
8	CAN High
9	CAN Low
10	ECU Power Sense
11	Solenoid Power Sense
12	Solenoid Ground Sense
13	
14	
15	
16	

Pin	Function CONN A
1	Signal Ground
2	
3	
4	
5	ECU Ground
6	
7	TXD Transmitted Data
8	
9	
10	RXD Received Data
11	CTS Clear to Send
12	
13	
14	
15	
16	
17	CAN High
18	
19	
20	Continuous Power
21	
22	
23	
24	
25	
26	
27	
28	CAN Low
29	
30	RTS Request to Send
31	

IntelliAg® Harnessing

Power Harness P/N 467980455





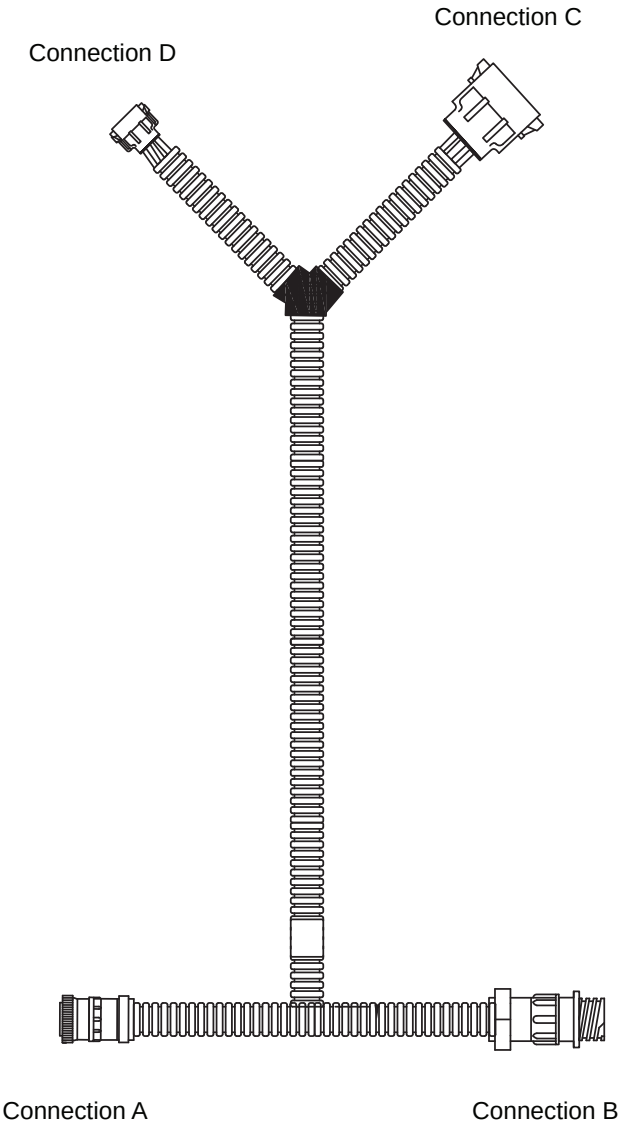
Pin	Function CONN A
1	Sol Ground
2	Ground
3	Sol Power +12V
4	Power +12V
5	
6	CAN Power +12V
7	CAN Ground
8	Signal High ~+2.6v
9	Signal Low ~+2.6v

Pin	Function CONN D
1	ECU Relay
2	ECU Power
3	Continuous Power
4	Solenoid Relay
5	ECU Ground
6	CAN Power
7	CAN Ground
8	CAN High
9	CAN Low
10	ECU Power Sense
11	Solenoid Power Sense
12	Solenoid Ground Sense
13	
14	
15	
16	

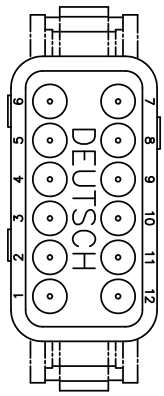
IntelliAg® Harnessing

Trimble ISO Harness P/N 467980482

Pin	Function CONN D
1	ECU Ground
2	ECU Power



Pin	Function CONN C
1	CAN High
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	CAN Low



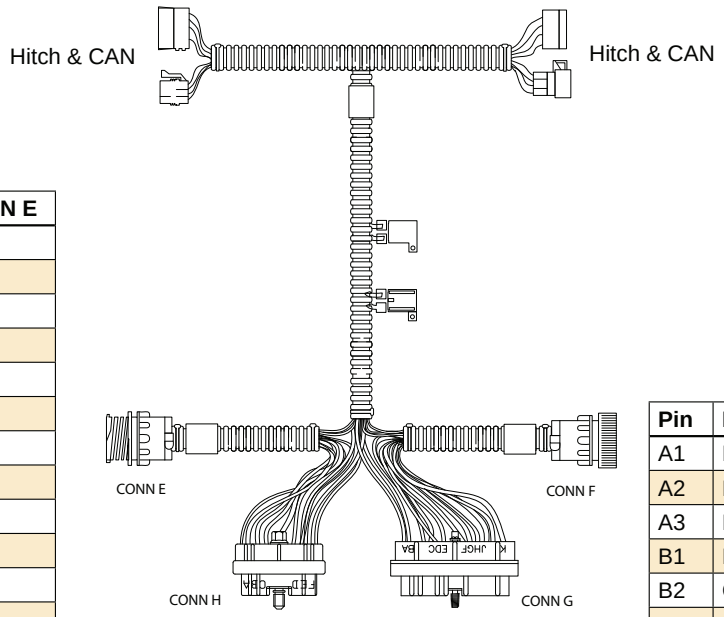
WIRE SIDE VIEW

Connects AI-100 to Trimble Navigation Controller

Pin	Function CONN A&B
1	ECU Relay
2	ECU Power
3	Continuous Power
4	Solenoid Relay
5	ECU Ground
6	CAN Power
7	CAN Ground
8	CAN High
9	CAN Low
10	ECU Power Sense
11	Solenoid Power Sense
12	Solenoid Ground Sense
13	
14	
15	
16	

IntelliAg® Harnessing

WSMT 'T' Harness P/N 467980850



Pin	Function CONN E
1	DIG Input #1
2	DIG Input #2
3	DIG Input #3
4	DIG Input #4
5	DIG Input #5
6	DIG Input #6
7	DIG Input #7
8	DIG Input #8
9	DIG Input #9
10	DIG Input #10
11	DIG Input #11
12	DIG Input #16
13	ANG/DIG Input 1A
14	ANG/DIG Input 2A
15	ANG/DIG Input 3A
16	ANG/DIG Input 4A
17	
18	
19	
20	
21	
22	
23	
24	+8V or +5V Power
25	+8V or +5V Power
26	ECU Ground
27	ECU Ground
28	
29	
30	
31	
32	
33	
34	ECU Power +12V
35	
36	
37	REL/DIG Input 1R

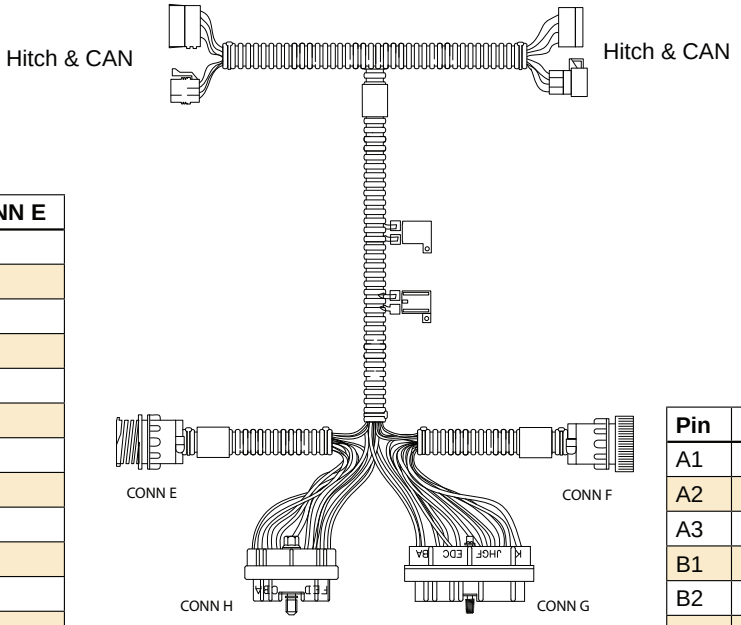
Pin	Function CONN F
1	Solenoid Ground
2	Solenoid Power
3	+8V or +5V Supply
4	PWM Power Driver 1
5	PWM Power Driver 2
6	PWM Power Driver 3
7	Relay Driver 1
8	Relay Driver 2
9	Relay Driver 3
10	Relay Driver 4
11	PWM Power Driver 4
12	DIG Input 13
13	DIG Input 14
14	DIG Input 15
15	REL/DIG Input 2R
16	REL/DIG Input 3R
17	REL/DIG Input 1R
18	DIG Input 12
19	ECU Power +12V
20	ECU Ground
21	Imp Lift/Test Switch
22	
23	
24	

Pin	Function CONN H
1A	DIG Input #1
2A	DIG Input #6
3A	DIG Input #11
1B	DIG Input #2
2B	DIG Input #7
3B	ANG/DIG Input 1A
1C	DIG Input #3
2C	ANG/DIG Input 3A
3C	ECU Ground
1D	DIG Input #4
2D	ANG/DIG Input 4A
3D	+8V or +5V Power
1E	DIG Input #5
2E	DIG Input #16
3E	ANG/DIG Input 2A
1F	DIG Input #8
2F	DIG Input #9
3F	DIG Input #10

Pin	Function CONN G
A1	Relay Driver 1
A2	DIG Input #12
A3	REL/DIG Input 1R
B1	PWM Power Driver 1
B2	CAN Low
B3	REL/DIG Input 2R
C1	Relay Driver 2
C2	CAN High
C3	REL/DIG Input 3R
D1	PWM Power Driver 3
D2	DIG Input #1
D3	DIG Input #13
E1	DIG Input #15
E2	DIG Input #14
E3	+8V or +5V Power
F1	ECU Power +12V
F2	DIG Input #16
F3	ECU Ground
G1	Relay Driver 4
G2	Ground
G3	DIG Input #11
H1	Relay Driver 3
H2	Ground
H3	Ground
J1	PWM Power Driver 2
J2	
J3	Solenoid Power
K1	PWM Power Driver 4
K2	Solenoid Power +12V
K3	Solenoid Power

IntelliAg® Harnessing

WSMT 'T' Harness P/N 467980852



Pin	Function CONN E
1	DIG Input #1
2	DIG Input #2
3	DIG Input #3
4	DIG Input #4
5	DIG Input #5
6	PLUG
7	DIG Input #7
8	DIG Input #8
9	DIG Input #9
10	DIG Input #10
11	DIG Input #11
12	DIG Input #16
13	ANG/DIG Input 1A
14	ANG/DIG Input 2A
15	ANG/DIG Input 3A
16	ANG/DIG Input 4A
17	
18	
19	
20	
21	
22	
23	
24	+8V or +5V Power
25	+8V or +5V Power
26	ECU Ground
27	ECU Ground
28	
29	
30	
31	
32	
33	
34	ECU Power +12V
35	
36	
37	REL/DIG Input 1R

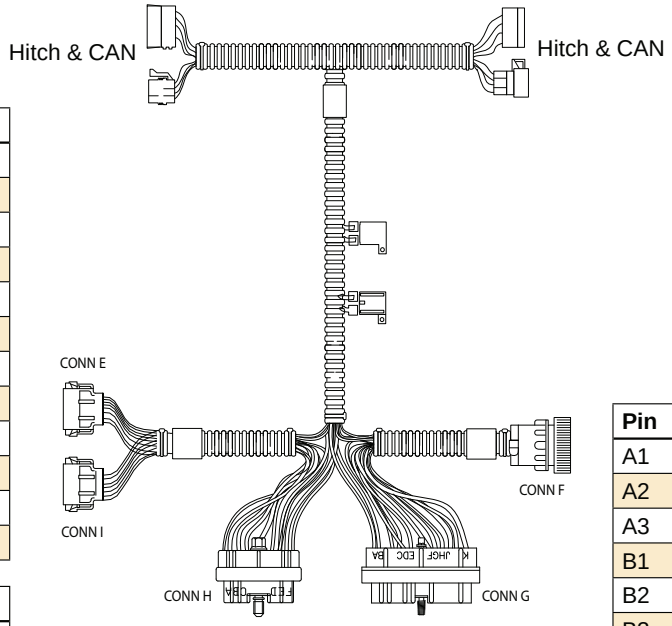
Pin	Function CONN F
1	Solenoid Ground
2	Solenoid Power
3	+8V or +5V Supply
4	PWM Power Driver 1
5	PWM Power Driver 2
6	PWM Power Driver 3
7	Relay Driver 1
8	Relay Driver 2
9	Relay Driver 3
10	Relay Driver 4
11	PWM Power Driver 4
12	DIG Input 13
13	DIG Input 14
14	DIG Input 15
15	REL/DIG Input 2R
16	REL/DIG Input 3R
17	REL/DIG Input 1R
18	DIG Input 12
19	ECU Power +12V
20	ECU Ground
21	Imp Lift/Test Switch
22	Appl Rate Error 1
23	Appl Rate Error 2
24	

Pin	Function CONN H
1A	DIG Input #1
2A	DIG Input #6
3A	DIG Input #11
1B	DIG Input #2
2B	DIG Input #7
3B	ANG/DIG Input 1A
1C	DIG Input #3
2C	ANG/DIG Input 3A
3C	ECU Ground
1D	DIG Input #4
2D	ANG/DIG Input 4A
3D	+8V or +5V Power
1E	DIG Input #5
2E	DIG Input #16
3E	ANG/DIG Input 2A
1F	DIG Input #8
2F	DIG Input #9
3F	DIG Input #10

Pin	Function CONN G
A1	Relay Driver 1
A2	DIG Input #12
A3	REL/DIG Input 1R
B1	PWM Power Driver 1
B2	CAN Low
B3	REL/DIG Input 2R
C1	Relay Driver 2
C2	CAN High
C3	REL/DIG Input 3R
D1	PWM Power Driver 3
D2	DIG Input #1
D3	DIG Input #13
E1	DIG Input #15
E2	DIG Input #14
E3	+8V or +5V Power
F1	ECU Power +12V
F2	Appl Rate Error 2
F3	ECU Ground
G1	Relay Driver 4
G2	Ground
G3	Appl Rate Error 1
H1	Relay Driver 3
H2	Ground
H3	Ground
J1	PWM Power Driver 2
J2	PLUG
J3	Solenoid Power
K1	PWM Power Driver 4
K2	Solenoid Power +12V
K3	Solenoid Power

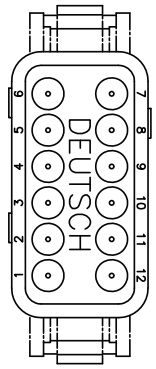
IntelliAg® Harnessing

WSMT 'T' Harness P/N 467980851



Pin	Function CONN E
1	PLUG
2	PLUG
3	PLUG
4	PLUG
5	ANG/DIG Input 1A
6	ANG/DIG Input 2A
7	ANG/DIG Input 3A
8	ANG/DIG Input 4A
9	+8V or +5V Supply
10	ECU Ground
11	PLUG
12	PLUG

Pin	Function CONN I
1	DIG Input #1
2	DIG Input #2
3	DIG Input #3
4	DIG Input #4
5	DIG Input #5
6	DIG Input #6
7	DIG Input #7
8	DIG Input #8
9	DIG Input #9
10	DIG Input #10
11	DIG Input #11
12	DIG Input #16



WIRE SIDE VIEW

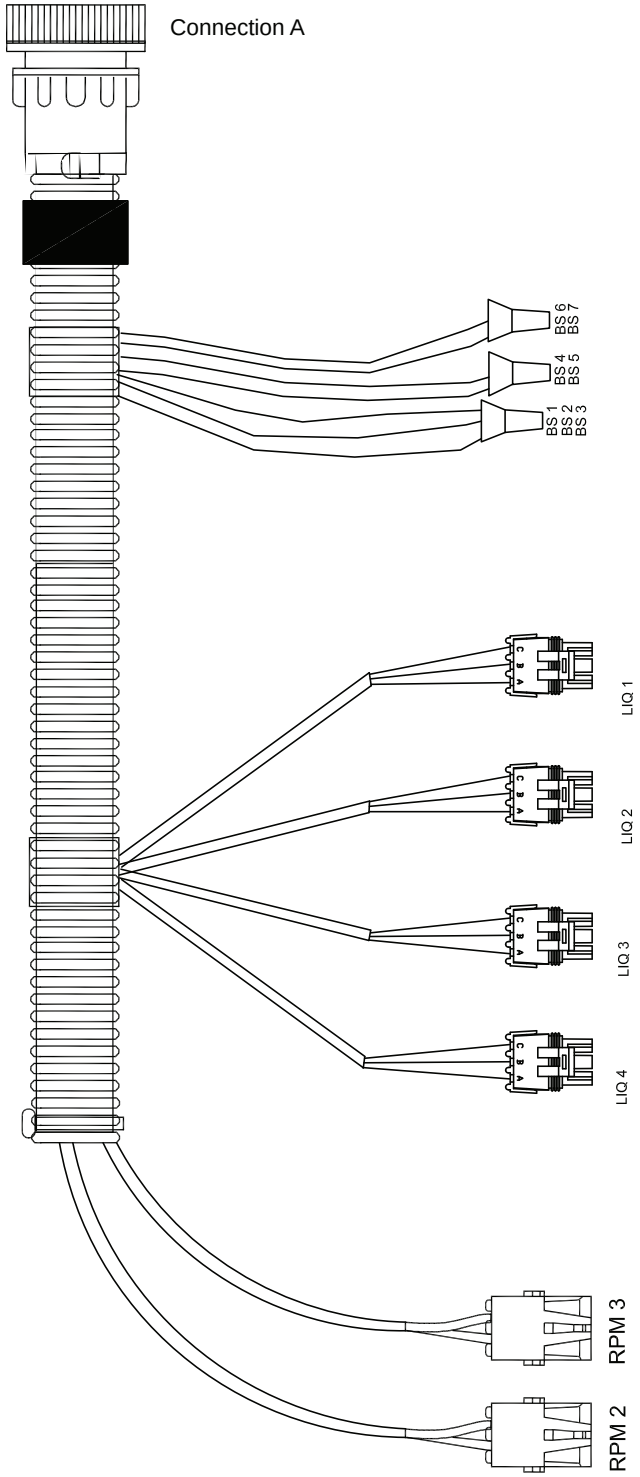
Pin	Function CONN F
1	Solenoid Ground
2	Solenoid Power
3	+8V or +5V Supply
4	PWM Power Driver 1
5	PWM Power Driver 2
6	PWM Power Driver 3
7	Relay Driver 1
8	Relay Driver 2
9	Relay Driver 3
10	Relay Driver 4
11	PWM Power Driver 4
12	DIG Input 13
13	DIG Input 14
14	DIG Input 15
15	REL/DIG Input 2R
16	REL/DIG Input 3R
17	REL/DIG Input 1R
18	DIG Input 12
19	ECU Power +12V
20	ECU Ground
21	Imp Lift/Test Switch
22	
23	
24	

Pin	Function CONN H
1A	DIG Input #1
2A	DIG Input #6
3A	DIG Input #11
1B	DIG Input #2
2B	DIG Input #7
3B	ANG/DIG Input 1A
1C	DIG Input #3
2C	ANG/DIG Input 3A
3C	ECU Ground
1D	DIG Input #4
2D	ANG/DIG Input 4A
3D	+8V or +5V Power
1E	DIG Input #5
2E	DIG Input #16
3E	ANG/DIG Input 2A
1F	DIG Input #8
2F	DIG Input #9
3F	DIG Input #10

Pin	Function CONN G
A1	Relay Driver 1
A2	DIG Input #12
A3	REL/DIG Input 1R
B1	PWM Power Driver 1
B2	CAN Low
B3	REL/DIG Input 2R
C1	Relay Driver 2
C2	CAN High
C3	REL/DIG Input 3R
D1	PWM Power Driver 3
D2	DIG Input #1
D3	DIG Input #13
E1	DIG Input #15
E2	DIG Input #14
E3	+8V or +5V Power
F1	ECU Power +12V
F2	PLUG
F3	ECU Ground
G1	Relay Driver 4
G2	Ground
G3	PLUG
H1	Relay Driver 3
H2	Ground
H3	Ground
J1	PWM Power Driver 2
J2	PLUG
J3	Solenoid Power
K1	PWM Power Driver 4
K2	Solenoid Power +12V
K3	Solenoid Power

IntelliAg® Harnessing

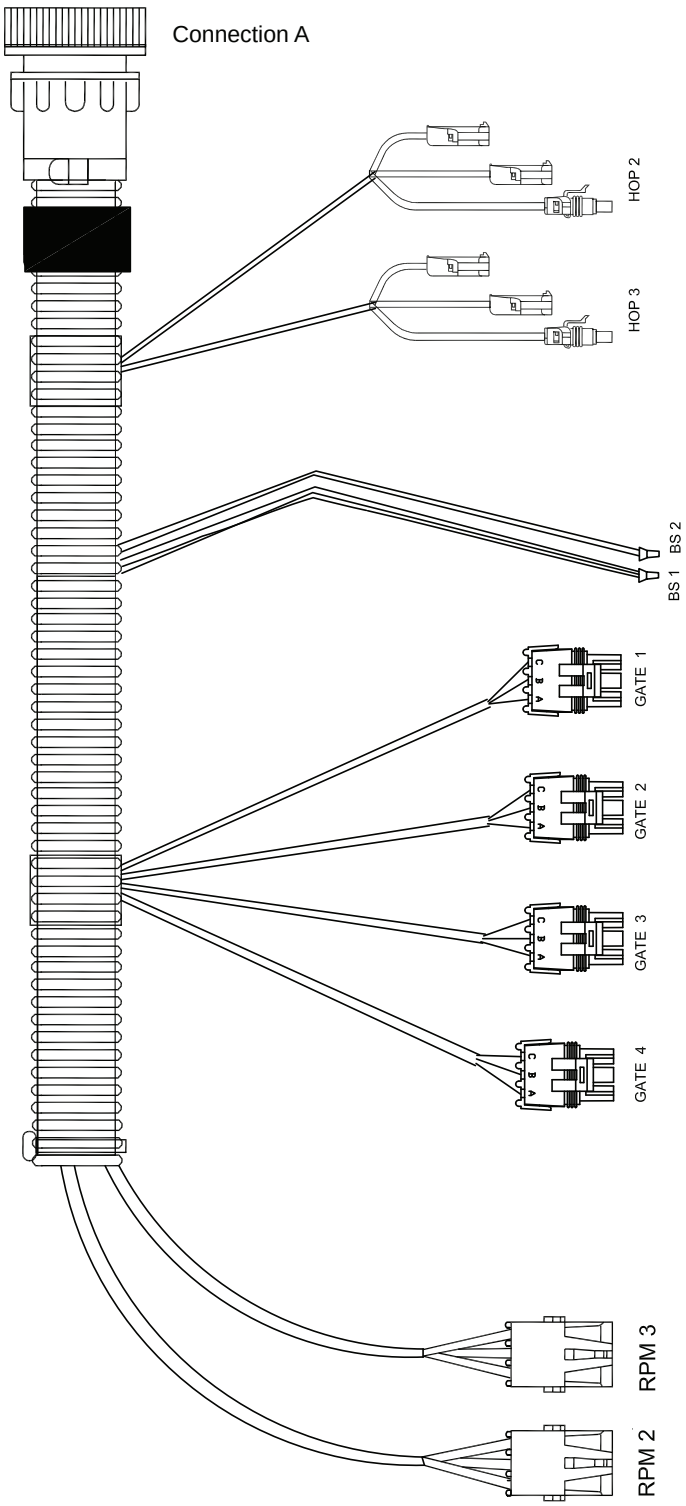
Accessory Harness P/N 467980860



Pin	Function CONN A
1	RPM Signal 2
2	RPM Signal 3
3	Boom Sense 6
4	Boom Sense 7
5	Boom Sense 1
6	
7	Boom Sense 2
8	Boom Sense 3
9	Boom Sense 4
10	Boom Sense 5
11	
12	
13	Liquid Signal 1
14	Liquid Signal 2
15	Liquid Signal 3
16	Liquid Signal 4
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	Ground
27	
28	
29	
30	
31	
32	
33	
34	Power +12V
35	
36	
37	

IntelliAg® Harnessing

Accessory Harness P/N 467980861

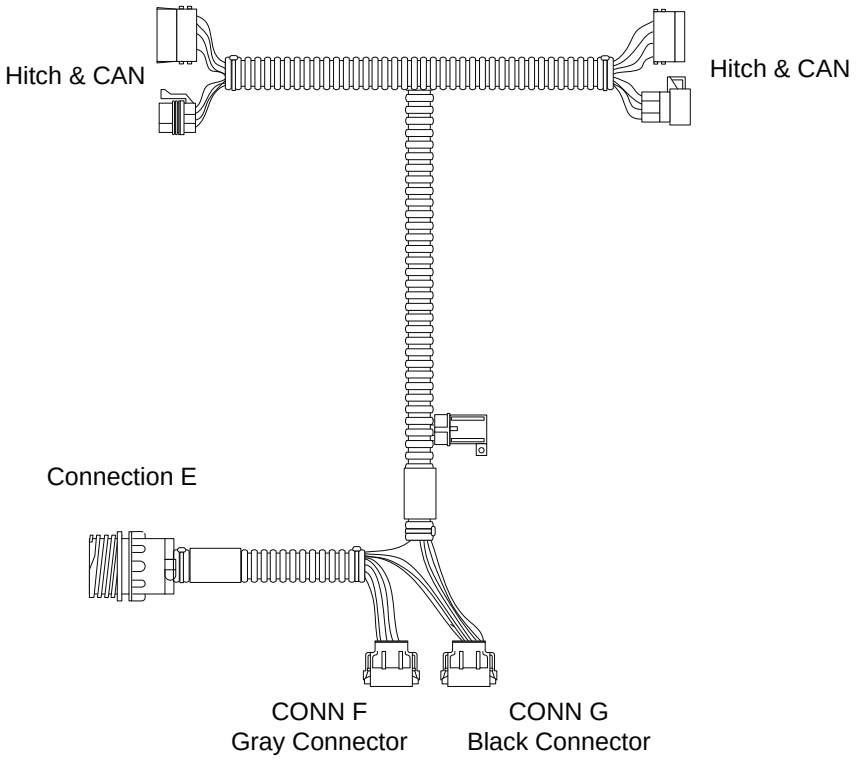


Pin	Function CONN A
1	RPM Signal 2
2	RPM Signal 3
3	Hopper Signal 2
4	Hopper Signal 3
5	Boom Sense 1
6	
7	Boom Sense 2
8	Boom Sense 3
9	Boom Sense 4
10	Boom Sense 5
11	
12	
13	Gate Signal 1
14	Gate Signal 2
15	Gate Signal 3
16	Gate Signal 4
17	
18	
19	
20	
21	
22	
23	
24	
25	Hopper Power
26	Gate & RPM Ground
27	Hopper Ground
28	
29	
30	
31	
32	
33	
34	Power Gate & RPM +12V
35	
36	
37	

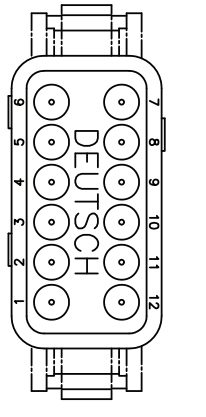
IntelliAg® Harnessing

Working Set Member Harness P/N 467981200

Pin	Function CONN E
1	DIG Input #1
2	DIG Input #2
3	DIG Input #3
4	DIG Input #4
5	DIG Input #5
6	DIG Input #6
7	DIG Input #7
8	DIG Input #8
9	DIG Input #9
10	DIG Input #10
11	DIG Input #11
12	DIG Input #12
13	DIG Input #13
14	DIG Input #14
15	DIG Input #15
16	DIG Input #16
17	DIG Input #17
18	DIG Input #18
19	
20	
21	
22	
23	
24	+8V or +5V Power
25	+8V or +5V Power
26	ECU Ground
27	ECU Ground
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	



Pin	Function CONN F Gray Connector
1	DIG Input #1
2	DIG Input #2
3	DIG Input #3
4	DIG Input #4
5	DIG Input #5
6	DIG Input #6
7	DIG Input #7
8	DIG Input #8
9	DIG Input #9
10	DIG Input #10
11	DIG Input #11
12	DIG Input #12

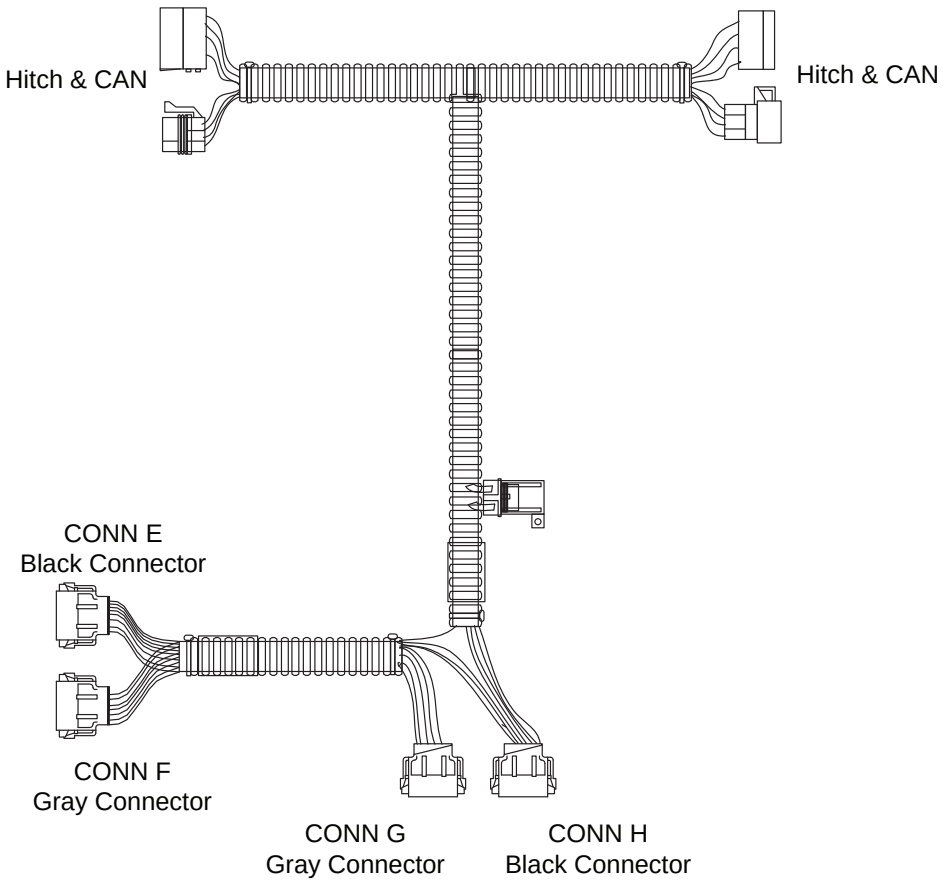


WIRE SIDE VIEW

Pin	Function CONN G Black Connector
1	DIG Input #13
2	DIG Input #14
3	DIG Input #15
4	DIG Input #16
5	DIG Input #17
6	DIG Input #18
7	CAN High
8	CAN Low
9	+8V or +5V Power
10	ECU Ground
11	ECU Power
12	ECU Ground

IntelliAg® Harnessing

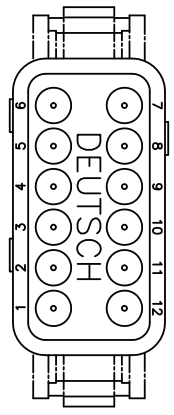
Working Set Member Harness P/N 467981201



Pin	Function CONN E Black Connector
1	DIG Input #17
2	DIG Input #18
3	PLUG
4	PLUG
5	DIG Input #13
6	DIG Input #14
7	DIG Input #15
8	DIG Input #16
9	Power
10	Ground
11	PLUG
12	PLUG

Pin	Function CONN F Gray Connector
1	DIG Input #1
2	DIG Input #2
3	DIG Input #3
4	DIG Input #4
5	DIG Input #5
6	DIG Input #6
7	DIG Input #7
8	DIG Input #8
9	DIG Input #9
10	DIG Input #10
11	DIG Input #11
12	DIG Input #12

Pin	Function CONN G Gray Connector
1	DIG Input #1
2	DIG Input #2
3	DIG Input #3
4	DIG Input #4
5	DIG Input #5
6	DIG Input #6
7	DIG Input #7
8	DIG Input #8
9	DIG Input #9
10	DIG Input #10
11	DIG Input #11
12	DIG Input #12

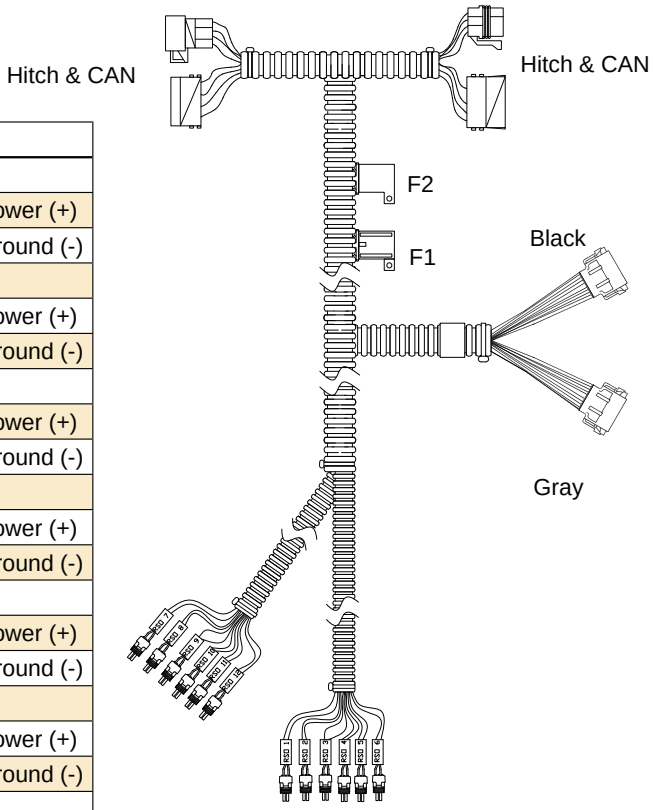


WIRE SIDE VIEW

Pin	Function CONN H Black Connector
1	DIG Input #13
2	DIG Input #14
3	DIG Input #15
4	DIG Input #16
5	DIG Input #17
6	DIG Input #18
7	CAN High
8	CAN Low
9	+8V or +5V Power
10	ECU Ground
11	ECU Power
12	ECU Ground

IntelliAg® Harnessing

12 Row Shutoff Control Harness P/N 467982100



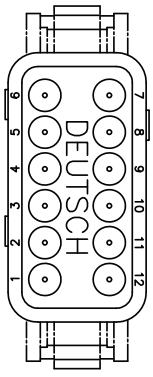
Pin	Function
	RSO 1
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 2
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 3
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 4
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 5
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 6
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 7
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 8
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 9
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 10
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 11
A	Solenoid Power (+)
B	Solenoid Ground (-)
	RSO 12
A	Solenoid Power (+)
B	Solenoid Ground (-)

Pin	F1 Fuse Holder
	Solenoid Power
	15 Amp Fuse

Pin	F2 Fuse Holder
	ECU Power
	5 Amp Fuse

Pin	Function BLACK
1	RSO 11 (-)
2	RSO 9 (-)
3	CAN High
4	
5	
6	ECU Power
7	ECU Ground
8	
9	
10	CAN Low
11	RSO 10 (-)
12	RSO 12 (-)

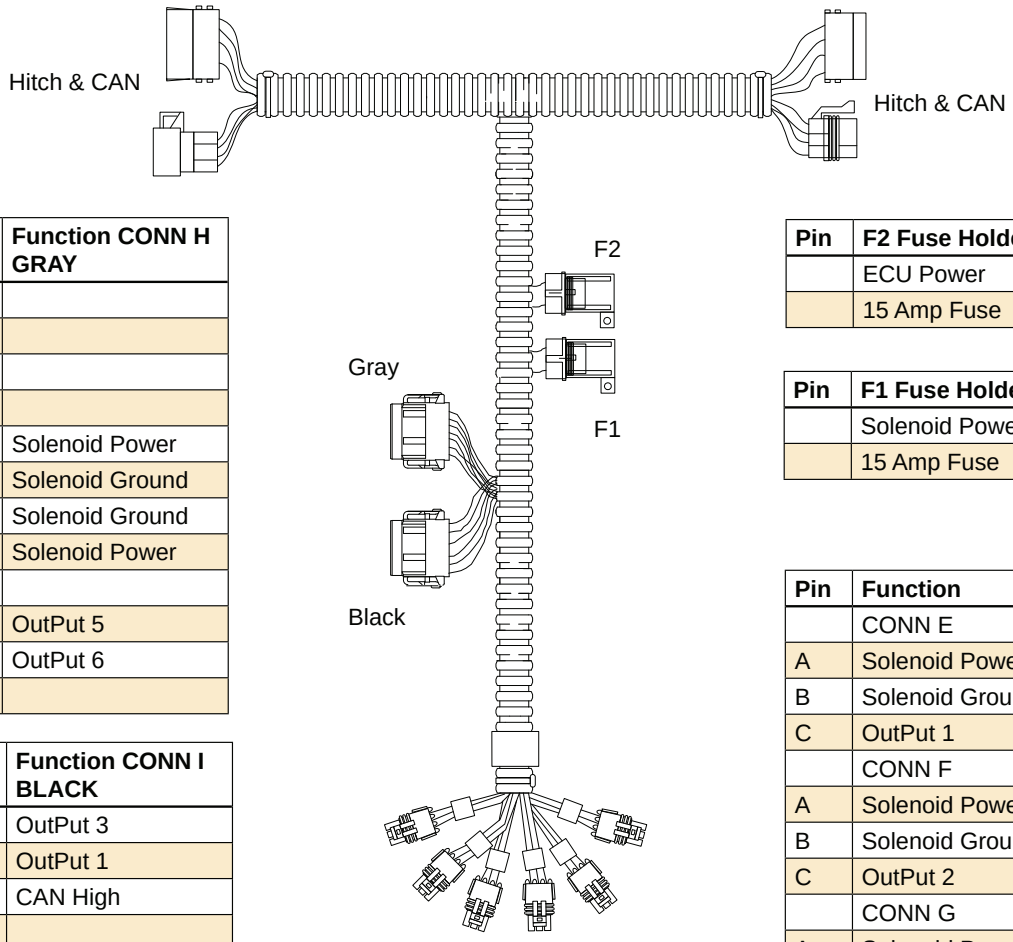
Pin	Function GRAY
1	RSO 8 (-)
2	RSO 6 (+)
3	RSO 5 (+)
4	RSO 7 (-)
5	Solenoid Power
6	Solenoid Ground
7	Solenoid Ground
8	Solenoid Power
9	RSO 3 (-)
10	RSO 1 (+)
11	RSO 2 (+)
12	RSO 4 (-)



WIRE SIDE VIEW

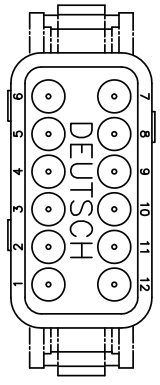
IntelliAg® Harnessing

3 Wire Boom Control Harness 467983100



Pin	Function CONN H GRAY
1	
2	
3	
4	
5	Solenoid Power
6	Solenoid Ground
7	Solenoid Ground
8	Solenoid Power
9	
10	OutPut 5
11	OutPut 6
12	

Pin	Function CONN I BLACK
1	OutPut 3
2	OutPut 1
3	CAN High
4	
5	
6	ECU Power
7	ECU Ground
8	
9	Ground Boom ID
10	CAN Low
11	OutPut 2
12	OutPut 4



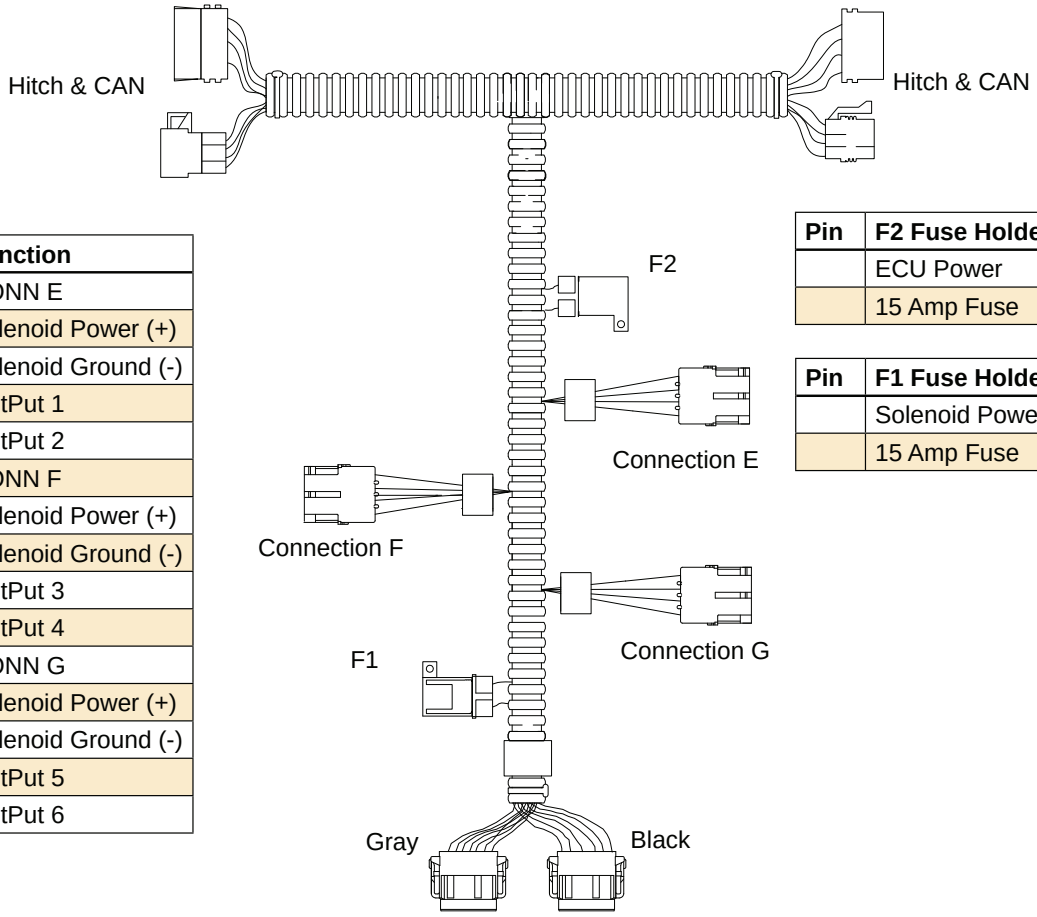
WIRE SIDE VIEW

Pin	F2 Fuse Holder
	ECU Power
	15 Amp Fuse

Pin	F1 Fuse Holder
	Solenoid Power
	15 Amp Fuse

Pin	Function
	CONN E
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 1
	CONN F
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 2
	CONN G
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 3
	CONN J
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 4
	CONN K
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 5
	CONN L
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 6

IntelliAg® Harnessing *2 Wire Boom Control Harness P/N 467983101*

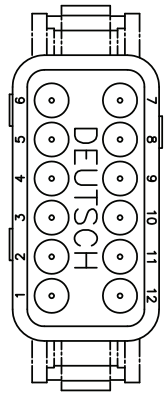


Pin	Function
	CONN E
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 1
D	OutPut 2
	CONN F
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 3
D	OutPut 4
	CONN G
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 5
D	OutPut 6

Pin	F2 Fuse Holder
	ECU Power
	15 Amp Fuse

Pin	F1 Fuse Holder
	Solenoid Power
	15 Amp Fuse

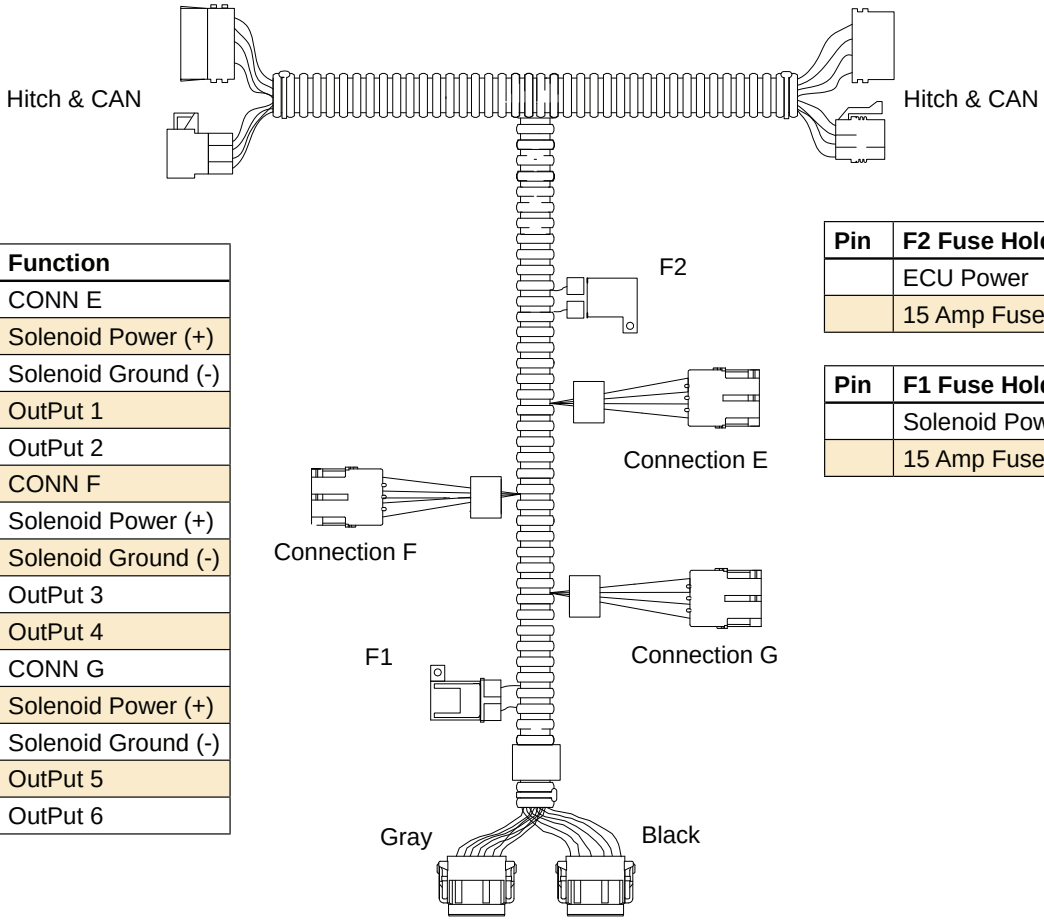
Pin	Function CONN H GRAY
1	
2	
3	
4	
5	Solenoid Power
6	Solenoid Ground
7	Solenoid Ground
8	Solenoid Power
9	
10	Boom 5
11	Boom 6
12	



WIRE SIDE VIEW

Pin	Function CONN I BLACK
1	Boom 3
2	Boom 1
3	CAN High
4	
5	
6	ECU Power
7	ECU Ground
8	
9	Ground Boom ID
10	CAN Low
11	Boom 2
12	Boom 4

IntelliAg® Harnessing 2 Wire High Current Row Control Harness P/N 467983501

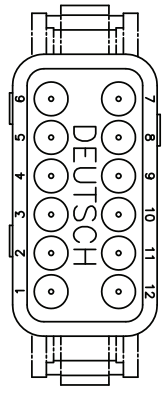


Pin	Function
	CONN E
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 1
D	OutPut 2
	CONN F
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 3
D	OutPut 4
	CONN G
A	Solenoid Power (+)
B	Solenoid Ground (-)
C	OutPut 5
D	OutPut 6

Pin	F2 Fuse Holder
	ECU Power
	15 Amp Fuse

Pin	F1 Fuse Holder
	Solenoid Power
	15 Amp Fuse

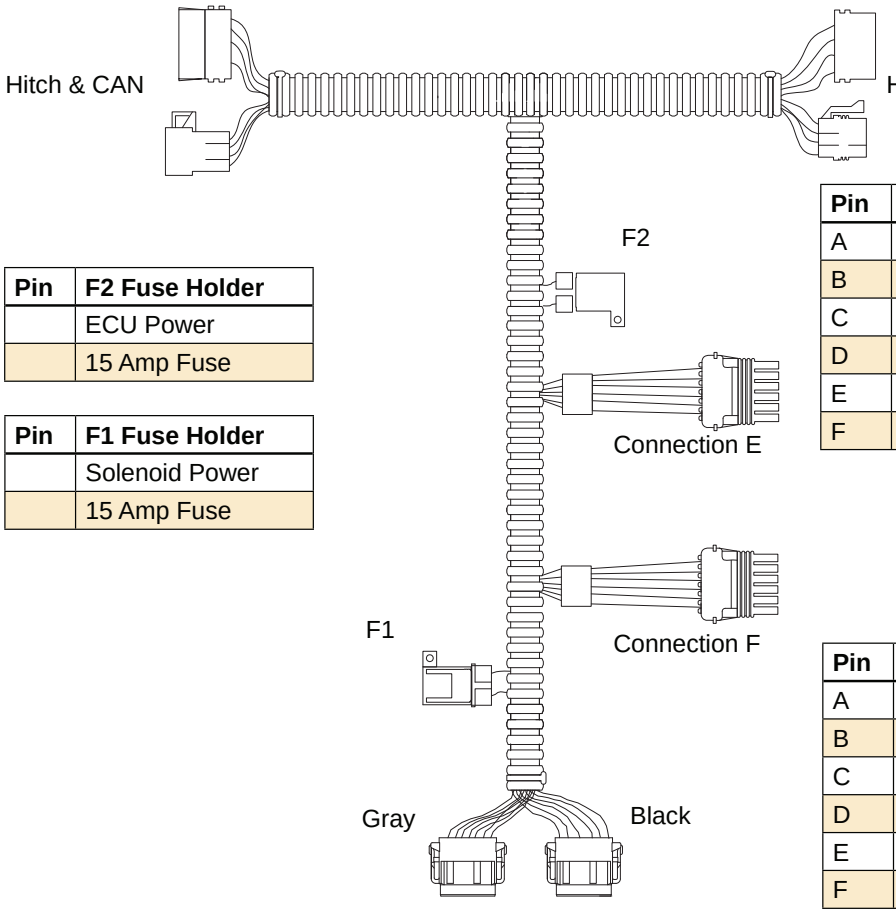
Pin	Function CONN H GRAY
1	
2	
3	
4	
5	Solenoid Power
6	Solenoid Ground
7	Solenoid Ground
8	Solenoid Power
9	
10	Row 5
11	Row 6
12	



WIRE SIDE VIEW

Pin	Function CONN I BLACK
1	Row 3
2	Row 1
3	CAN High
4	Ground Clutch ID
5	
6	ECU Power (+12V)
7	ECU Ground
8	
9	
10	CAN Low
11	Row 2
12	Row 4

IntelliAg® Harnessing TruCount Air Clutch Row Control Harness P/N 467983505



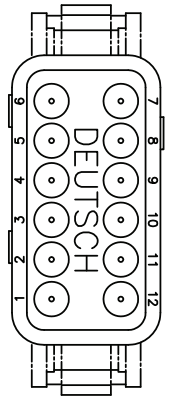
Pin	F2 Fuse Holder
	ECU Power
	15 Amp Fuse

Pin	F1 Fuse Holder
	Solenoid Power
	15 Amp Fuse

Pin	Function CONN E
A	Solenoid Power
B	Output 1
C	Output 2
D	Output 3
E	Output 4
F	

Pin	Function CONN F
A	Solenoid Power
B	Output 5
C	Output 6
D	Output 7
E	Output 8
F	

Pin	Function CONN H GRAY
1	
2	Output 8
3	Output 7
4	
5	Solenoid Power
6	Solenoid Ground
7	Solenoid Ground
8	Solenoid Power
9	
10	Output 5
11	Output 6
12	



WIRE SIDE VIEW

Pin	Function CONN I BLACK
1	Output 3
2	Output 1
3	CAN High
4	Ground Tru ID
5	
6	ECU Power (+12V)
7	ECU Ground
8	
9	Ground Boom ID
10	CAN Low
11	Output 2
12	Output 4

Autopilot

Navigation Controller

Receiver

The Trimble Autopilot Steering Navigation system is an automated steering system enhancement that can be integrated with the IntelliAg system offering a complete, precision farming solution in a single cab display. Autopilot is a GPS-based control system that steers the tractor in a straight line at better than +/- 1 inch with minimal cumulative errors or drift when using RTK correction.

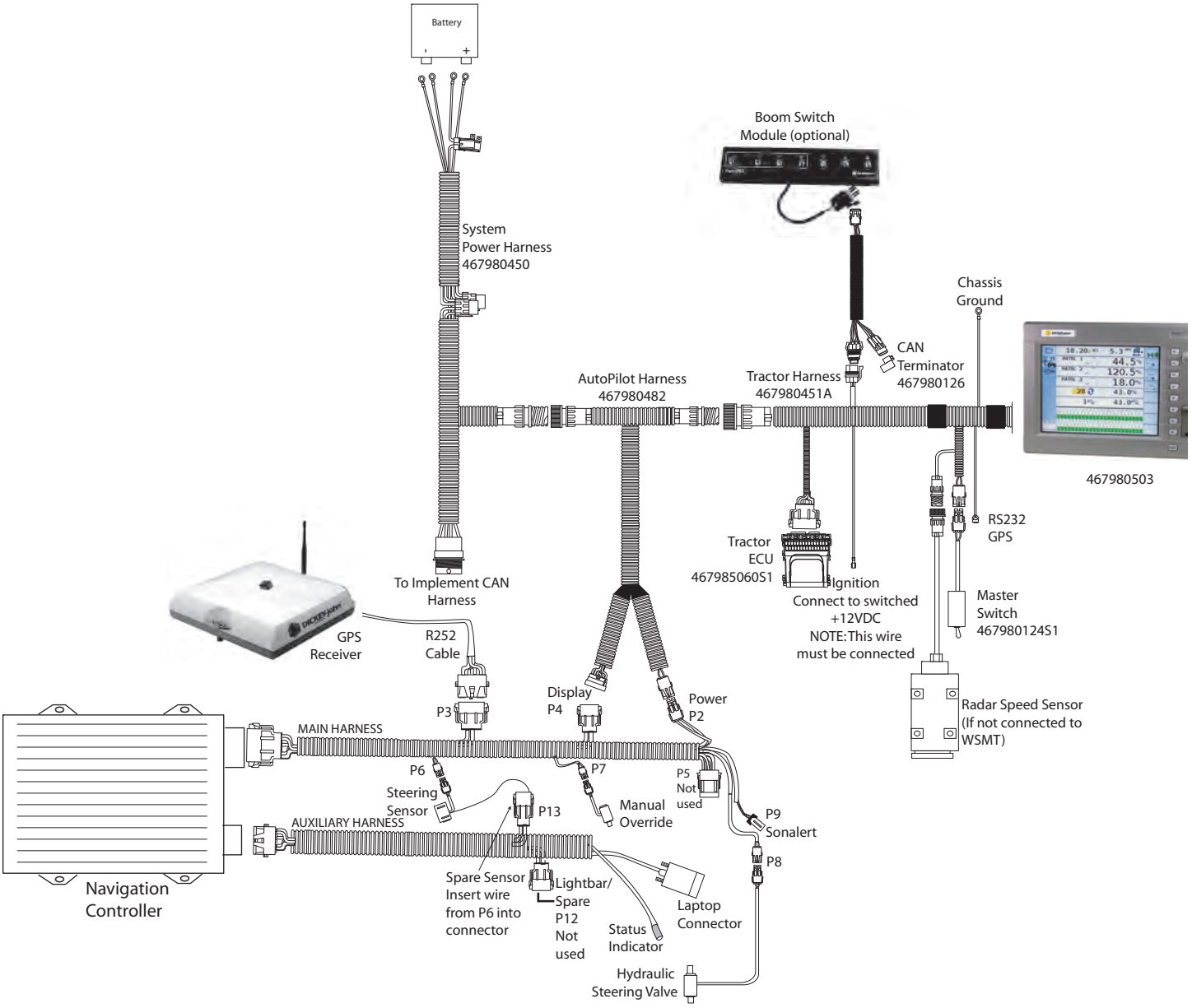
Autopilot system components required to enable automated steering include:

- Autopilot Tractor Kit (Navigation Controller, loaded with IntelliAg steering firmware, Harness, GPS Receiver)
- 10" Virtual Terminal with IntelliAg
- IntelliAg system power and tractor cab harness
- SD card
- TECU

Features:

- Guidance to pre-defined field patterns at a speed as low as 0.2 mph and as high as 22 mph
- Works with various types of GPS signals including RTK, WAAS, Omnistar HP)
- 5 choices of field pattern types
- Field and farm events saved to SD card
- Vehicle and implement configurations saved for repeated use
- Accuracy is maintained after system is calibrated
- Operator Alert Timeout steers tractor in circles if not acknowledged by operator in specified time
- Software updates downloadable from website

Autopilot


Battery
Boom Switch Module (optional)
System Power Harness 467980450
Chassis Ground
CAN Terminator 467980126
AutoPilot Harness 467980482
Tractor Harness 467980451A
467980503
RS232 GPS
Tractor ECU 467985060S1
Ignition Connect to switched +12VDC NOTE: This wire must be connected
Master Switch 467980124S1
To Implement CAN Harness
GPS Receiver
R252 Cable
P3
Display P4
Power P2
Radar Speed Sensor (If not connected to WSMT)
MAIN HARNESS
P6
P7
P5 Not used
Steering Sensor
P13
Manual Override
P9 Sonalert
AUXILIARY HARNESS
P8
Navigation Controller
Spare Sensor Insert wire from P6 into connector
Lightbar/ Spare P12 Not used
Laptop Connector
Status Indicator
Hydraulic Steering Valve

Autopilot Kits

The following components are required when ordering an Autopilot system for use with IntelliAg:

- AgGPS Platform Kit
- Receiver and Navigation Controller Kit
- Hydraulic Hose and Fitting Kit
- AgGPS 252 Antenna Bracket

Optional Parts and Kits:

- Rover Radios
- RTK Base Stations
- Repeater Radios

AgGPS Autopilot Platform Kits (use with hose kit and antenna bracket) (Required)	
Part Number	**Description**
54037-54	AgChem Ro-Gator x54 Sprayer
54037-52	AgChem Ro-Gator x64/x74 Sprayer
54037-40	AgChem Terra-Gator 8103 Floater
54038-21	Case IH2388, 2377 Series Combine
54035-23	Case IH72xx Magnum Series
54035-24	Case IH89xx Magnum Series
54038-25	Case IH AFX 8010 and New Holland CR Series Combine
54035-28	Case IH CVS and New Holland TVT Series
54037-62	Case IH FLX 3510/4510 Floater
54035-25	Case IH MX180-270/210-285/215-305
54035-22	Case IH MXM 120-190 and New Holland TM 120-190 Series
54035-26	Case IH MXU and New Holland TSA Series
54037-12	Case IH SPX 3150, SPX 3185
54037-15	Case IH SPX 3310, SPX 3200
54037-11	Case IH SPX 4420, 4410, 4260 with Surveyor Cab and SPX 3320 Sprayer
54036-30	Case IH Steiger 9xx0 4 WD Series QuadTrac w/Autosense
54036-15	Case IH STX Steiger & QuadTrac and New Holland TJ Model Year 2005 and earlier
54036-16	Case IH Model Year 2006 STX Steiger & QuadTrac and New Holland TJ
54035-10	Challenger 35-55 Series
54035-11	Challenger 65-95 E Series
54035-45	Challenger MT 600B Series, Massey Ferguson 84xx Series and DTxxxA Series
54035-18	Challenger MT 700/800 Series using ISO Bus Interface
54038-40	Class Lexion 5xx Series Combine
54035-29	Fendt 900 Series Tractor
54035-65	John Deere JD4x40/50/55/60 Series Tractor
54037-20	John Deere JD47x0 Sprayer
54037-21	John Deere JD47x0 Sprayer AutoTrac Ready
54037-23	John Deere JD4920 Sprayer AutoTrac Ready
54035-60	John Deere JD6x00, 6x10 Wheeled Series
54035-74	John Deere JD7x00, 7x10, 7x20 Wheeled Series
54035-39	John Deere JD7x20 Large Frame Wheeled Series AutoTrac Ready
54035-80	John Deere JD8000T Series
54035-30	John Deere JD8x00, 8x10, 8x20 Wheeled Series (Non-ILS)
54035-34	John Deere JD8x20 ILS Wheeled Series
54035-39	John Deere JD8xx0 ILS and non-ILS Wheeled Series AutoTrac Ready
54035-85	John Deere JD9000T Series
54036-20	John Deere JD9x00 4WD
54036-21	John Deere JD9x00 4WD AutoTrac Ready
54038-11	John Deere JD9x50/60 STS Series Combine
54038-12	John Deere JD9x50/60 STS Series Combine AutoTrac Ready
54037-22	John Deere JD4920 Sprayer
54035-27	New Holland TG 210-285 Series *
54035-90	New Holland, Ford 8x70 Series

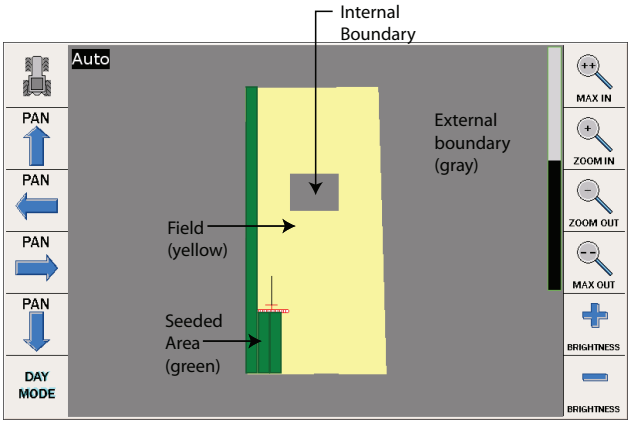
AgGPS Autopilot Receiver and Navigation Controller Kits (Required)	
The Navigation Controller contains ISO11783 compatible software to work with the DICKEY-john IntelliAg 10" Virtual Terminal. Interface cable 467980480 is included in the kit which allows for connection of the AgGPS system to the DICKEY-john IntelliAg Cab Harness.	
Part Number	**Description**
60252-30	Autopilot DGPS AgGPS 252 (OmniSTAR VBS, WAAS and EGNOS) with NavController II
60252-30-HP	Autopilot HP AgGPS 252 (OmniSTAR XP/HP/VBS, WAAS and EGNOS) with NavController II
60252-30-RTK	Autopilot RTK AgGPS 252 (RTK, OmniSTAR HP/VBS, WAAS and EGNOS) with NavController II (use with Rover Radio)
AgGPS Autopilot Receiver and Navigation Controller Kits for CNH Factory Ready Vehicles	
57049-30	Autopilot DGPS Ag GPS 252 (OmniSTAR VBS, WAAS and EGNOS) with NCII for CNH Factory Ready Vehicles
57049-30-HP	Autopilot HP AgGPS 252 (OmniSTAR XP/HP/VBS, WAAS and EGNOS) with NC II for CNH Factory Ready Vehicles
57049-30-RTK	Autopilot RTK AgGPS 252 (RTK, OmniSTAR HP/VBS, WAAS and EGNOS) with NC II for CNH Factory Ready Vehicles (use with Rover Radio)
Rover Radios (only required with RTK Receiver)	
53696-90	AgGPS900 Rover Radio (use with AgGPS252) 900 Mhz (North America)
53696-44	AgGPS450 Rover Radio (use with AgGPS252)430-450 Mhz (South America, South Africa, UK, France)
53696-46	AgGPS450 Rover Radio (use with AgGPS252) 450-470 Mhz (Europe-Germany, Ukraine)
AgGPS RTK Base Station Kits (900 Mhz frequency, Rover radio not included) (Optional)	
60500-90	AgGPS RTK Base 900 Fixed Base Station with 900 Mhz radio
60510-90	AgGPS RTK Base 900 Mobile Base Station with 900 Mhz radio
60510-95	AgGPS RTK GNSS Base 900 Mobile Base Station with 900 Mhz radio
60500-64	AgGPS RTK Base 450 Fixed Base Station with 430-450 Mhz radio
60500-66	AgGPS RTK Base 450 Fixed Base Station with 450-470 Mhz radio
60510-64	AgGPS RTK Base 450 Mobile Base Station with 430-450 Mhz radio
60510-66	AgGPS RTK Base 450 Mobile Base Station with 450-470 Mhz radio

Autopilot Kits

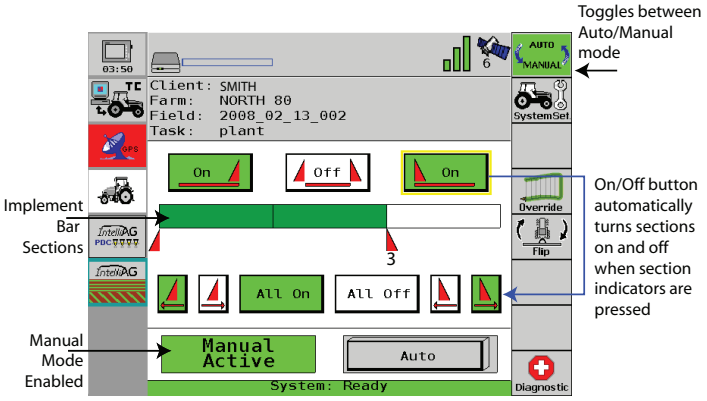
AgGPS Autopilot SiteNet 900 Repeater Radios (Optional)	
Part Number	**Description**
53350-90	Repeater (High Mobility) SNB900 Radio
AgGPS Autopilot SiteNet 450 Repeater Radios (Optional)	
60450-44-10	Ag PDL450 Mobile Repeater Kit 430-450 Mhz, 0.5w 25 Khz
60450-44-11	Ag PDL450 Mobile Repeater Kit 430-450 Mhz, 0.5w 12.5 Khz
60450-46-10	Ag PDL450 Mobile Repeater Kit 450-470 Mhz, 0.5w 25 Khz
60450-46-11	Ag PDL450 Mobile Repeater Kit 450-470 Mhz, 0.5w 12.5 Khz
AG1161	Ag Tripod Heavy Duty Wood for Mobile Repeater Radio and RTK Base Station
57165-44-00	Ag PDL 450Fix Fixed Repeater Kit 430-450 Mhz, 2W, 25 Khz
57165-44-01	Ag PDL450Fix Fixed Repeater Kit 430-450 Mhz, 2W, 12.5 Khz
57165-44-10	Ag PDL450Fix Fixed Repeater Kit 430-450 Mhz, 0.5W, 25 Khz
57165-44-11	Ag PDL450Fix Fixed Repeater Kit 430-450 Mhz, 0.5W, 12.5 Khz
57165-46-00	Ag PDL450Fix Fixed Repeater Kit 450-470 Mhz, 2W, 25 Khz
57165-46-01	Ag PDL450Fix Fixed Repeater Kit 450-470 Mhz, 2W, 12.5 Khz
57165-46-10	Ag PDL450Fix Fixed Repeater Kit 450-470 Mhz, 0.5W, 25 Khz
57165-46-11	Ag PDL450Fix Fixed Repeater Kit 450-470 Mhz, 0.5W, 12.5 Khz
AgGPS Autopilot GPS Antenna and Radio Bracket Kits (Required)	
62380-00	Antenna Mounting Kit for Combines
55346	Case IH 9xx0 4WD Small and Large Frame Series
55345	Case IH STX Steiger/New Holland TJ 4WD 275-500 Large and Small Frame
0795-0290	Challenger 35-55, MT700/800 Series
55348	Generic Large Cab (45"-55") for Ag 252 (Terragator and Challenger 65/95 Series)
53676	Generic Medium Cab (37"-46") for Ag 252 (Case IH MX and SPX 4260/4410, NH TG, Rogator, John Deere Wheeled Tractor, Sprayers and Combines, MT600B, MF 84XX)
55349	Generic Small Cab Vehicles Roof Bracket Kit (27.5"-37.5") for Ag 252 (Case IH MXM, NH TM)
0795-0260	John Deere JD8xx0T and 9xx0T Track Series
55347	John Deere JD9xx0 4WD
55685-00	Magnetic Mounting Kit for AgGPS 252 (Case IH2388/2377 Combine, SPX 3150/3185/3200/3310)
55483	Case IH 2388 Combine Bin Extension Bracket
62388-01	Magnetic Mounting Kit, GPS Antenna for RTK Re-indexing

AgGPS Autopilot Hydraulic Hose and Fitting Kits (Required)	
Part Number	**Description**
59861	AgChem Ro-Gator 854 Sprayer (used with platform kit 54037-54 (H2)
59856	AgChem Ro-Gator 1254 Sprayer
57113	AgChem Ro-Gator x64/x74 Sprayer
51175	AgChem Terra-Gator 8103 Sprayer
59767	Case IH 2388/2377 Combine (used with platform kit 54038-21 (H2)
59148	Case IH 72xx Magnum Series
59149	Case IH 89xx Magnum Series
50713	Case IH 9xx0 4WD Large Frame Series
50537	Case IH 9xx0 4WD Small Frame Series
57116	Case IH AFX 8010 Combine
59787	Case IH CVX and New Holland TVT Series
57096	Case IH FLX 3510 Floater
55907	Case IH FLX 4510 Floater
53289	Case IH MX Wheeled Series
52365	Case IH MXM 120-190 and New Holland TM 120-190 Series
59150	Case IH MXU and New Holland TSA Series
57114	Case IH SPX 3150, SPX 3185
56815	Case IH SPX 3200/3310
58399	Case IH SPX 4420, 4410, 4260 with Surveyor Cab and SPX 3320 Sprayer
49771	Case IH STX Steiger 4WD Wheeled and QuadTrac 275-325 and NH TJ 4WD 275-325 Small Frame
49917	Case IH STX Steiger 4WD Wheeled and QuadTrac 375-500 and New Holland TJ 4WD 275-500 Large Frame
59867	Case IH Model Year 2006 STX Steiger and QuadTrac and New Holland TJ
55763	Challenger 35-55 Series
56529	Challenger 65-95 E Series
58856	Challenger MT600B Series, Massey Ferguson 84xx Series and DTxxxA Series
60980	Claas Lexion 5xx Series Combine
60193	Fendt 900 Series
59431	John Deere JD4x40/50/55/60 Series Tractor
50148	John Deere JD47x0 Sprayer
55517	John Deere 7xx0 Wheeled Hydraulic Kit
51504	John Deere 8x20 ILS Wheeled Series
51570	John Deere 8x20 Wheeled Series (Non-ILS)
0795-0130	John Deere JD6xx0 Wheeled Series
58648	John Deere JD9050, JD9060 STS Combine (used with platform kit 54038-11) (H2)
50530	John Deere JD9x00 4WD
54983	John Deere JD4920 Sprayer Hydraulic Kit
53290	New Holland TG Wheeled Series
60733	New Holland CR Combine
62759	New Holland, Ford 8X70 Series

Auto Section Control



Auto Section Control Terminal Display
Visually displays physical location, boundaries, seeded and non seeded areas



IntelliAg Virtual Terminal Display
Enable and disable individual planter sections

Auto Section Control is an automated row shutoff system that can be added to the IntelliAg planter system to automatically shutoff individual planter sections utilizing a GPS signal as previously planted areas are approached.

A dedicated Auto Section Control terminal displays a field map for easy identification of external field boundaries, seeded areas, and nonseeded areas.

Features:

- Real-time viewing of planting operation within the field without interruption of application rate and seed monitoring information
- Unique GPS latency adjustment for calibration of row shutoff at the precise time the planer enters a previously seeded area
- Manual override of planter sections in the event of a lost GPS signal or in special conditions
- Section shutoff and turn on when existing or entering a headland
- Day and night mode
- Saving field data by customer, farm, field, and task structure for viewing at a later date

Requirements:

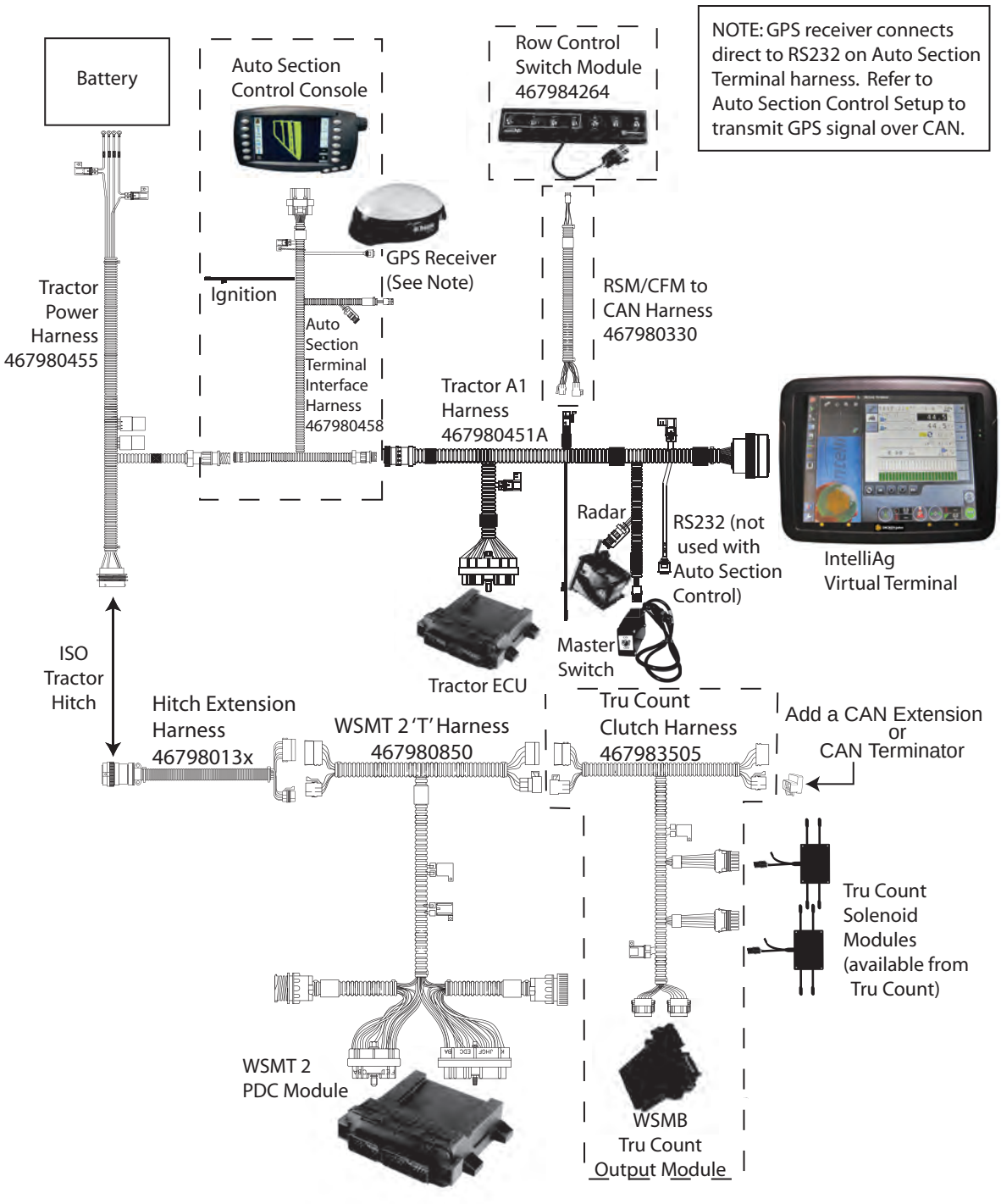
The Auto Section Control system will only interface and operate with an IntelliAg Planter Control system and compatible virtual terminal. The Auto Section Control system requires the following to operate:

- Compatible with IntelliAg A1+ virtual terminal, John Deere GS2 2600 display, or AGCO C2000 virtual terminal
- Auto Section Control console
- GPS receiver (5 Hz minimum)
- Tru Count WSMB module
- Tru Count WSMB harness
- Implement lift switch
- Row section control switch box

Part Number	Description
Auto Section Control Kit using DICKEY-john IntelliAg system P/N IASWATHKIT consists of the following components:	
46798-0505	Auto Section Control Console
46798-0612	Console Mounting Kit
46798-0458	Auto Section Control Cab Harness
46798-4264S1	Clutch Folding Module (CFM) Switch
46798-0330	Clutch Folding Module to CAN Harness
46798-0504	Auto Section Control Software License Fee
P/N IASWATHCON consists of the following components:	
46798-0505	Auto Section Control Console
467980504	Auto Section Control Software License Fee

Auto Section Control Harnessing

The Auto Section Control terminal connects to the IntelliAg tractor harness for communication with the IntelliAg ISO virtual terminal. A GPS receiver is required to provide implement position via CAN or RS232 communication. A row control switch module/clutch folding switch module provides quick access of turning sections on and off when manual override is required. Ignition wire connects to switched power source.


NOTE: GPS receiver connects direct to RS232 on Auto Section Terminal harness. Refer to Auto Section Control Setup to transmit GPS signal over CAN.
Battery
Auto Section Control Console
Row Control Switch Module 467984264
GPS Receiver (See Note)
Ignition
Tractor Power Harness 467980455
Auto Section Terminal Interface Harness 467980458
RSM/CFM to CAN Harness 467980330
Tractor A1 Harness 467980451A
Radar
RS232 (not used with Auto Section Control)
IntelliAg Virtual Terminal
Master Switch
Tractor ECU
ISO Tractor Hitch
Hitch Extension Harness 46798013x
WSMT 2 'T' Harness 467980850
Tru Count Clutch Harness 467983505
Add a CAN Extension or CAN Terminator
Tru Count Solenoid Modules (available from Tru Count)
WSMT 2 PDC Module
WSMB Tru Count Output Module

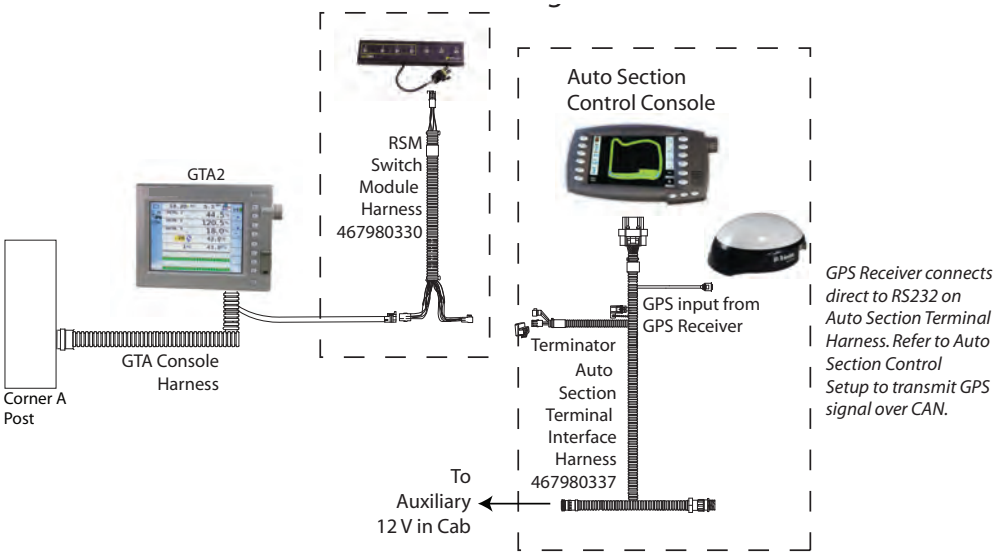
Auto Section Control

Don't forget to select a:
- GPS Receiver
- Clutch Folding Module

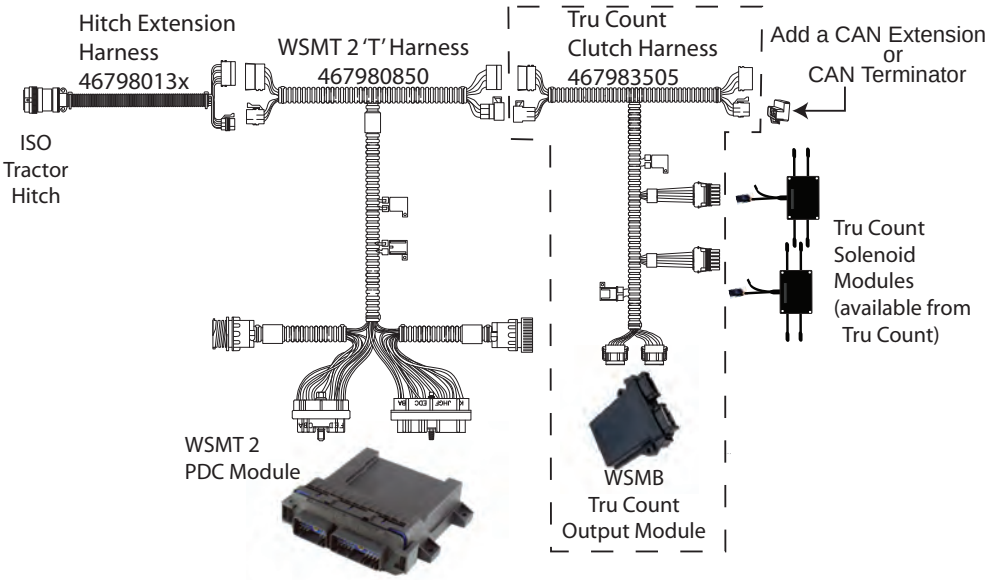
AGCO Kits/Harnessing

Auto Section Control Kit using AGCO GTA console
P/N GTASWATHKIT
AGCO tractors with a factory installed cab harness and GTA console requires this kit that contains the required harnesses that connect to the GTA console and auxiliary power connector in the cab.

Part Number	Description
46798-0505	Auto Section Control Console
46798-0612	Console Mounting Kit
46798-0337	Auto Section Control for non-IntelliAg Cabs
46798-4264	Remote Switch Module
46798-0330	Clutch Folding Module to CAN Harness
46798-0504	Auto Section Control Software License Fee
11001-1561A	Operator's Manual



Cab Harnessing



Implement Harnessing

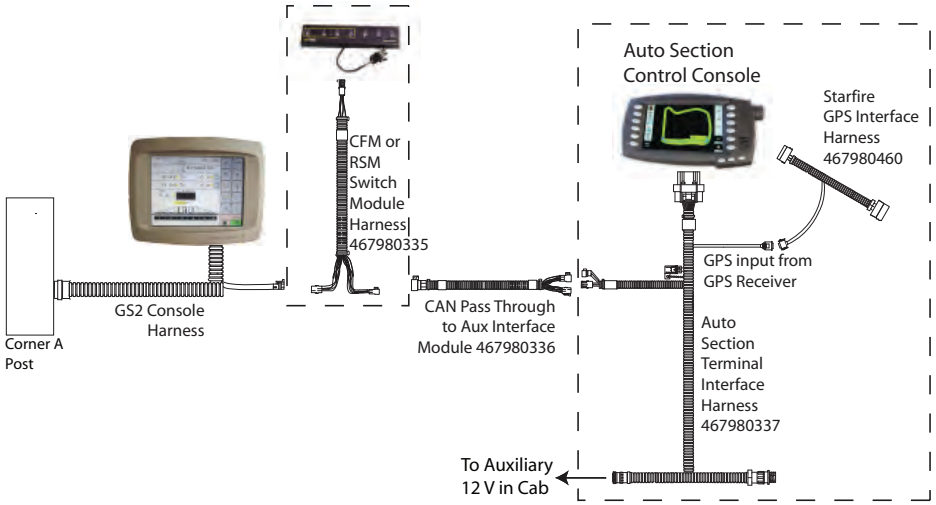
Auto Section Control

Deere Kits/Harnessing

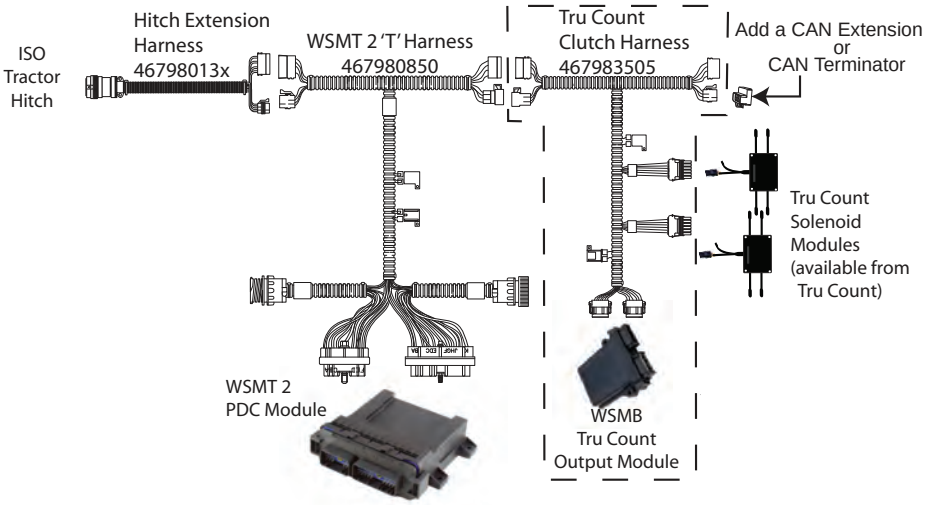
Don't forget to select a:
- GPS Receiver
- Clutch Folding Module

Auto Section Control Kit using John Deere GS2 console P/N GS2SWATHKIT
John Deere tractors with a factory installed cab harness and GS2 console requires this kit that contains the required harnesses that connect to the GS2 console and auxiliary power connector in the cab.

Part Number	Description
46798-0505	Auto Section Control Console
46798-0612	Console Mounting Kit
46798-0337	Auto Section Control for non-IntelliAg Cabs
46798-0336	GS2 4 pin to 6 pin Pass Through Cable
46798-4264S1	Clutch Folding Module (CFM) Switch
46798-0335	DICKEY-john ISO Switch Module to Deere ISO CAN Harness
46798-0504	Auto Section Control Software License Fee
11001-1561A	Operator's Manual


Auto Section Control Console
Starfire GPS Interface Harness 467980460
CFM or RSM Switch Module Harness 467980335
GPS input from GPS Receiver
GS2 Console Harness
Corner A Post
CAN Pass Through to Aux Interface Module 467980336
Auto Section Terminal Interface Harness 467980337
To Auxiliary 12 V in Cab

Cab Harnessing


ISO Tractor Hitch
Hitch Extension Harness 46798013x
WSMT 2 'T' Harness 467980850
Tru Count Clutch Harness 467983505
Add a CAN Extension or CAN Terminator
Tru Count Solenoid Modules (available from Tru Count)
WSMT 2 PDC Module
WSMB Tru Count Output Module

Implement Harnessing

Controller

Models I, II, and SE

Land Manager® I

Land Manager®II

Land Manager® SE

Land Manager® controllers are used to control fertilizer and chemical applications including:

- Liquid Flow
- Liquid Pressure
- Granular
- Anhydrous Ammonia

Three Land Manager consoles are available:
Land Manager® I
Land Manager® II
Land Manager® SE

Land Manager® I & II controls:

- Liquid
- Granular
- NH3 liquid flow
- Pressure-based, 2 digital accessories (fan RPM, hopper level, 1 analog accessory) or,
- One analog accessory (pressure sensor, temperature sensor standard RS232 port for GPS or printer)
- 10 boom section inputs

Land Manager® I & II Features:

- Variable rate application control
- Application library stores up to 10 configurations
- Creates and logs up to 10 individual reports
- Standard RS232 interface link for easy field software upgrades and upload/download of formal report information
- Records tank fill (with optional flow meter)
- Automatic pump shutoff
- Auto gain tunes responsiveness to application

Land Manager® II Features only:

- Dual channel
- Spray and spread with one console

Land Manager® SE controls:

- Liquid
- Granular
- NH3 liquid flow
- Pressure-based, 1 digital accessory (fan RPM, hopper level, vapor detector)
- 6 boom section inputs

Land Manager® SE Features:

- One button setup

Don't forget to select a:

- Radar speed sensor
- Ground speed sensor
- Universal distance (magnetic) sensor
- Radar Y cable
- Control system kit

Controller

A complete DICKEY-john Land Manager system consists of six components:

- Display console
- Master switch module
- Ground speed sensor
- Feedback device to monitor application rate
- Actuator device to regulate the application rate
- Harness system

Part Number Codes

LM1	One channel Land Manager
LM2	Two channel Land Manager
LMSE	Land Manager SE version
T	Truck Harness
PS	Pull Type Short Harnessing
PL	Pull Type Long Harnessing
R	Radar
U	Universal Distance Sensor
Y	Radar "Y" Cable

Nylon Liquid Flow Meter Ratings

Flow Meter	Flow Rate
1/2"	.3 - 5 GPM
3/4"	1.85-18.5 GPM
1"	2.64-26.4 GPM
1.5"	9.25-92.5 GPM
2"	19.00-198 GPM
3"	39.6-396 GPM
4"	79.0-790 GPM

To calculate liquid flow rates (GPM):
Width x Speed x Application Rate (GPA) x .00202
60 ft. x 15 mph x 20 gpa x .00202 = 36.36 GPM

To calculate NH3 or granular flow rates (lbs/hr):
Width x Speed x Application Rate (GPA) x .1212
42.5 ft. x 6 mph x 200 lbs NH3 x .1212 = 6181 lbs/hr

Maximum flow on pressure kits is based on 100 psi. Maximum flow rate for NH3 is based on 110 psi tank pressure. Ensure these pressures are accounted for when selecting systems.

Systems

Land Manager (1 channel/LM1)	
Part Number	**Description**
LM1/CCS Retro	Land Manager Console with CCS Retro Harness
LM1E	European LM System Sprayer Harness
LM1PL	LM1 System with Pull Type Long Harness
LM1PS	LM1 System with Pull Type Short Harness
LM1T	LM1 System with Truck Harness

Land Manager (2 channel/LM2)	
Part Number	**Description**
LM2PL	LM2 System with Pull Type Long Harness
LM2PS	LM2 System with Pull Type Short Harness
LM2T	LM2 System with Truck Harness

Land Manager SE System	
Part Number	**Description**
LMSEP	Land Manager SE with Pull Type Harness
LMSET	Land Manager SE with Truck Harness

Pressure			
Part Number	**Description**	**Valve Size (Inches)**	**Maximum Flow Rate**
L2P	Valve with 100 psi Transducer	2	220 GPM
L3P	Valve with 100 psi Transducer	3	600 GPM
LSP	Hydraulic Valve with 100 psi Transducer	Specify	
Nylon Flow			
L2POLYF	Ball Valve with 2 in. Flow Meter	2	19-198 GPM
NH3			
CCSNH3KIT	CCS NH3 System	3/4	4200 LBS/HR
CCSNH3KIT1	CCS NH3 System	1	5500 LBS/HR
CONTNH3KIT	Continental NH3 Kit	1 1/4	9600 LBS/HR

Radar Y Cables (Complete listing on pages 138-139)	
Part Number	**Description**
15295-0002	Radar Y (DICKEY-john Radar to 2 console)
45640-2520S3	Radar Y (DICKEY-john Radar to John Deere Dash and Console)
45640-2530S3	Radar Y (John Deere Magnavox Radar to Dash and Console)
45640-3030	Radar Y (Challenger A or B Series Cat Radar to Dash and Console)
45640-4360S1	Radar Y (Challenger C Series Cat Radar to Dash and Console)
45640-4670	Radar Y (Steiger and Maxum Radar to Dash and Console)
45640-4810	Radar Y (John Deere In Cab Radar Convenience Plug Adapter)

LM1 and LM2 Kits

LM1 Kits

LM1E

Component	Item Description	Qty
LM1CSL0PT1	CSL, LAND MANAGER, PICK TO ORDER	1
466390910S1	MTG BRACKET KIT LM	1
466050030	MASTER SW MODULE ASY	1
110112820	TY WRAP BUNDLE	1
466391090S1	HARN ASSY, J2	1
466391120S1	HARNESS ASSY., CAB HARNESS 1CH J1 A/S	1
466391130S1	HARNESS ASSY., SPRAYER HARN. 1CH A/S	1
110011351	LAND MANGER OPERATORS MANUAL I/II	1
110011090	INST INSTR LAND MAN	1

LM1PL

Component	Item Description	Qty
466390025S1	CSL[CE]LAND MANAGER	1
466390910S1	MTG BRACKET KIT LM	1
466050030	MASTER SW MODULE ASY	1
110112820	TY WRAP BUNDLE	1
466391090S1	HARN ASSY, J2	1
466391003S1	CAB HARN J1 LONG	1
466391030S1	IMP HARN 1 CHANNEL	1
110011351	LAND MANGER OPERATORS MANUAL I/II	1
110011090	INST INSTR LAND MAN	1

LM1PS

Component	Item Description	Qty
466390025S1	CSL[CE]LAND MANAGER	1
466390910S1	MTG BRACKET KIT LM	1
466050030	MASTER SW MODULE ASY	1
110112820	TY WRAP BUNDLE	1
466391090S1	HARN ASSY, J2	1
466391000S1	CAB HARN J1	1
466391030S1	IMP HARN 1 CHANNEL	1
110011351	LAND MANGER OPERATORS MANUAL I/II	1
110011090	INST INSTR LAND MAN	1

LM1T

Component	Item Description	Qty
466390025S1	CSL[CE]LAND MANAGER	1
466390910S1	MTG BRACKET KIT LM	1
466050030	MASTER SW MODULE ASY	1
110112820	TY WRAP BUNDLE	1
466391090S1	HARN ASSY, J2	1
466391081S1	HARN ASY CNTL SYS J1	151
LAND MANGER OPERATORS MANUAL I/II		1
110011090	INST INSTR LAND MAN	1

LM2 Kits

LM2PL

Component	Item Description	Qty
466390026S1	CSL[CE]LAND MAN II	1
466390910S1	MTG BRACKET KIT LM	1
466050030	MASTER SW MODULE ASY	1
110112820	TY WRAP BUNDLE	1
466391090S1	HARN ASSY, J2	1
466391003S1	CAB HARN J1 LONG	1
466391031S1	IMP HARN 2 CHANNEL	1
110011351	LAND MANGER OPERATORS MANUAL I/II	1
110011090	INST INSTR LAND MAN	1

LM2PS

Component	Item Description	Qty
466390026S1	CSL[CE]LAND MAN II	1
466390910S1	MTG BRACKET KIT LM	1
466050030	MASTER SW MODULE ASY	1
110112820	TY WRAP BUNDLE	1
466391090S1	HARN ASSY, J2	1
466391000S1	CAB HARN J1	1
466391031S1	IMP HARN 2 CHANNEL	1
110011351	LAND MANGER OPERATORS MANUAL I/II	1
110011090	INST INSTR LAND MAN	1

LM2T

Component	Item Description	Qty
466390026S1	CSL[CE]LAND MAN II	1
466390910S1	MTG BRACKET KIT LM	1
466050030	MASTER SW MODULE ASY	1
110112820	TY WRAP BUNDLE	1
466391090S1	HARN ASSY, J2	1
466391210S1	HARN ASY CNTL SYS J1	1
466391051S1	HARNESS,POWER	1
110011351	LAND MANGER OPERATORS MANUAL I/II	1
110011090	INST INSTR LAND MAN	1

LMSE/Press/Flow/NH3 Kits

LMSE

LMSEP

Component	Item Description	Qty
466390029S1	CSL[CE]LAND MANAGER SE	1
466390910S1	MTG BRACKET KIT LM	1
466050030	MASTER SW MODULE ASY	1
110112820	TY WRAP BUNDLE	1
466391260S1	HARNESS ASSY ADAPT, LAND MANAGER SE	1
457901892	HARNESS,MAIN,CCS100	1
457901891S1	HARNESS,IMPLEMENT	1
466391050S1	HARN,ACT PWR	1
110011248	LAND MANAGER SE VERS. 1.5SW MANUAL	1
110011197	INSTALLATION INSTR LAND MANAGER SE	1

LMSET

Component	Item Description	Qty
466390029S1	CSL[CE]LAND MANAGER SE	1
466390910S1	MTG BRACKET KIT LM	1
466050030	MASTER SW MODULE ASY	1
110112820	TY WRAP BUNDLE	1
466391260S1	HARNESS ASSY ADAPT, LAND MANAGER SE	1
464360210A	HARN CCS MAIN TRUCK	1
110011248	LAND MANAGER SE VERS. 1.5SW MANUAL	1
110011197	INSTALLATION INSTR LAND MANAGER SE	1

PRESSURE

L2P

Component	Item Description	Qty
467095150	VALVE & ACTUATOR 2”	1
465700010	XDUCER, 100PSI CCS	1
110040228	HARDWARE PKG-DJSC	1

L3P

Component	Item Description	Qty
467095170	VALVE & ACTUATOR 3”	1
465700010	XDUCER, 100PSI CCS	1

LSP

Component	Item Description	Qty
HV0PT1	HYDRAUL. VALVE OPTION SET, GRAN. VALVES	1
464360030A	VALVE ACTUATOR DRIVER	1
465700010	XDUCER, 100PSI CCS	1

FLOW

L2POLYF

Component	Item Description	Qty
PM00370048S1	FLOWMETER/SNSR, 2”, 19.0-198 GPM	1
467095150	VALVE & ACTUATOR 2”	1

NH3

CCSNH3KIT

Component	Item Description	Qty
467095300	VLVE,BALL,3/4”(19MM)	1
457901610S1	FLOWMETER,CCS100	1
457902500A	TTU	1
457902280BS1	PIPE HARDWARE KIT	1
464820200S1	ACTUATOR 1.0” VALVE	1
11001362A	MANUAL, NH3 OPERATING	1

CCSNH3KIT1

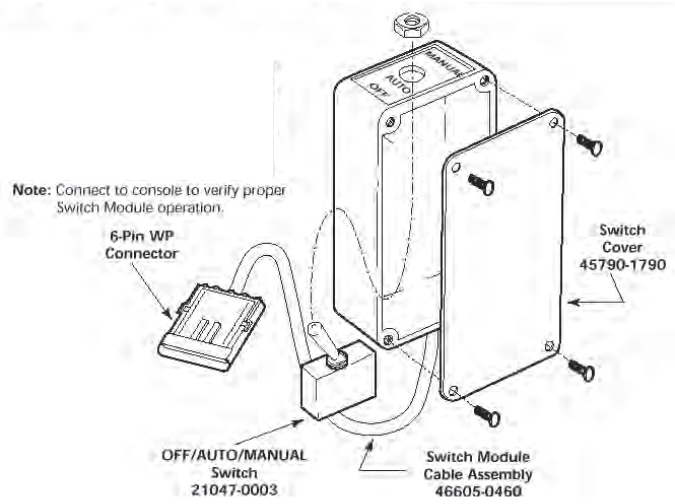
Component	Item Description	Qty
467095040	BUNDLE 1” VALVE	1
457901610S1	FLOWMETER,CCS100	1
457902500A	TTU	1
457902280BS1	PIPE HARDWARE KIT	1
110011362A	MANUAL, NH3 OPERATING	1
206510011	NIPPLE,1.0X2.0 NPT	2

CONTNH3KIT

Component	Item Description	Qty
457903320B	SUPER FLOW ASSY	1
457903380	BALL VALVE, CONTROL	1
457903390	BRACKET, ACTUATOR MOUNT	1
464820200S1	ACTUATOR 1.0” VALVE	1
457901610S1	FLOWMETER,CCS100	1
457903310S1	HARDWARE KIT CONT	1
110011362A	MANUAL, NH3 OPERATING	1
110011326	CONT. INSTALL INSTRUCTIONS	1
457903550	HARDWARE KIT NH3 VALVE CONT	1

Parts & Accessories

Land Manager Switch Module



Connector Pin Numbers		
Pin No.	**Color**	**Function/Voltage**
A	Black	Ground (0V)
B	White	Manual (0-12V)
C	Red	-12V
D	Green	Auto (0-12V)

Console	
Part Number	**Description**
46639-0025S1	Land Manager I Console
46639-0026S1	Land Manager II Console
46639-0029S1	Land Manager SE Console
Harness, Adapters, Hardware	
43940-0024	Ground Speed Sensor Extension 10 ft.
45790-1810	Sensor Extension 15 ft.
45790-1811	Sensor Extension 30 ft.
45790-1820	Valve Extension 15 ft.
45790-1891S1	LMSE Implement Harness
45790-1892	LMSE Main Harness (requires 46639-1260S1)
45790-2770S1	LMSE Main Harness Extension 20 ft.
46350-0090	Hall Effect Extension (Fan RPM) 20 ft.
46350-0120	Hall Effect to Radar Extension 15.5 ft.
46436-0210A	LM Truck Harness (required 46639-1260S1)
46605-0030	Land Manager Switch Module
46639-0970S1	Land Manager Switch Module Bracket
46639-0910S1	Land Manager Mounting Bracket
46639-1000S1	Land Manager Main Harness, short (1 channel)
46639-1003S1	Land Manager Main Harness, long (1 channel)
46639-1030S1	Land Manager Implement Harness (1 channel)
46639-1031S1	Land Manager Implement Harness (2 channel)
46639-1050S1	Actuator Power Harness
46639-1051S1	Actuator Power Harness (2 channel)
46639-1081S1	Truck Harness (1 channel)
46639-1090S1	Land Manager Power Harness (RS232)
46639-1101S1	LM to CCS Adaptor Harness
46639-1120S1	LM European J1 Cab Harness
46639-1130S1	LM European Sprayer Implement Harness
46639-1140S1	LM European Planter/Granular Implement Harness
46639-1150S1	LM European Speed & Area Implement Harness
46639-1210S1	Truck Harness (2 channel)
46639-1220S1	Main Harness Extension 25 ft.
46639-1260S1	LMSE to CCS Adaptor Harness
Switch Module	
46605-0030	LM Switch Module
46639-0970S1	LM Switch Module Bracket

Air Pressure

- Measures air pressure in seed hopper
- 12 Volts DC

Air Pressure Sensor

Air Pressure	
Part Number	**Description**
46682-0920S1	Air Pressure Sensor
46682-0922S1	Air Pressure Sensor with 1/2 in. Bushing

Hall-Effect

- Measures rotational shaft speed and ground speed
- Available in threaded or smooth surfaces for convenient mounting
- 12 volt sensor with square-wave signal output
- Detects teeth of sprocket, magnets, lug nuts, etc.

Hall-Effect Sensor

Connector Pin Numbers		
Pin No.	**Color**	**Function/Voltage**
A	Red	+12V
B	Black	Ground (0V)
C	Green	Signal (Sq. Wave)

Hall Effect	
Part Number	**Description**
46350-0030S1	Hall-Effect Sensor (smooth)
46697-0014S1	Hall-Effect Sensor (threaded)
46350-0120	Hall-Effect Sensor to Radar Extension 15.5 ft.
20040-0089	Jam Nut for threaded Hall-Effect Sensor (2 per sensor)
45968-0922	Hall-Effect Extension Cable 15 ft.
45910-0190	Magnet Kit

Hopper Level

- Mounts inside planter, drill, or air cart
- Alerts when seed or granular material reaches low level
- 8 and 12 Volts DC

Hopper Level Sensor

WP Connector Pin Numbers ID		
Pin No.	**Color**	**Function/Voltage**
A	Red	+12V
B	Black	Gnd
C	Green	Signal (0V/12V)
D	N.C.	

AMP Connector Pin Numbers ID		
Pin No.	**Color**	**Function/Voltage**
1	Black	Ground
2	Green	Signal (0V/12V)
3	N.C.	
4	Red	+12V

Hopper Level	
Part Number	**Description**
46682-0720S1	Hopper Level Sensor (Planter Monitor/IntelliAg)
46682-0721S1	Hopper Level Sensor 1/2 in. Bushing
46682-0720S3	Hopper Level Sensor
46682-0710S3	Hopper Level Extension Cable 20 ft. (Planter Monitor/IntelliAg)
46682-0714	Hopper Level Extension Cable 15 ft.
46682-0712S1	Hopper Level Extension Cable 10 ft.
46682-0713	Hopper Level Extension Cable 5 ft.
46421-0518S1	Hopper Level Sensor, WeatherPac Connector (Land Manager)

Application Rate

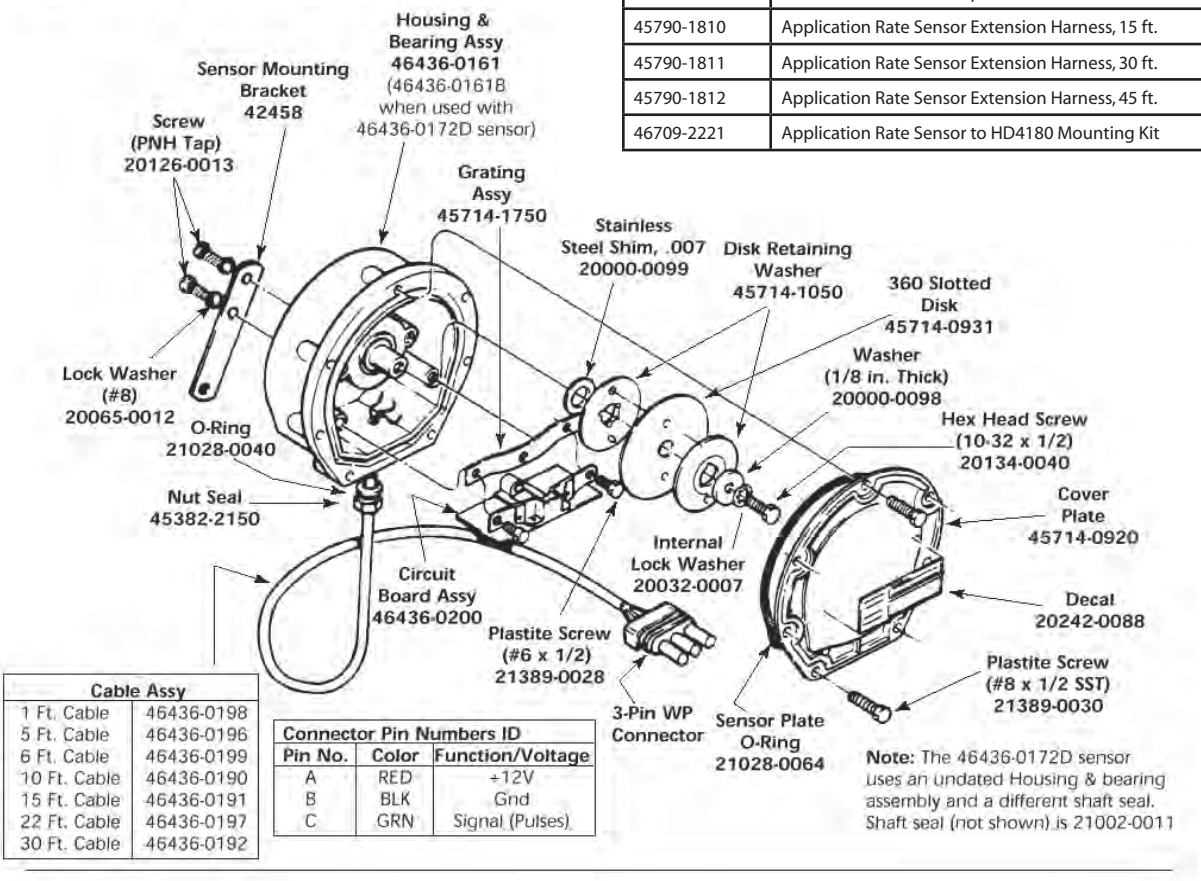
Application Rate Sensor

Couplers

See Test Equipment section for an Application Rate Sensor Tester.

- Measures shaft rotation speed
- Outputs at 360 pulses per revolution for increased accuracy
- RPM range 2 - 2,500
- Easily adapts to 1 and 1 1/4 in. diameter shafts
- 12 volt sensor with square-wave signal output

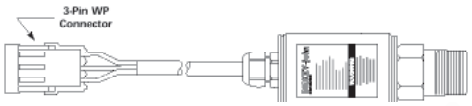
Application Rate	
Part Number	**Description**
46436-0178S1	Application Rate Sensor, 1 ft. Cable (360 pulse per rev)
46436-0176S1	Application Rate Sensor, 5 ft. Cable (360 pulse per rev)
46436-0170S1	Application Rate Sensor, 10 ft. Cable (360 pulse per rev)
46436-0171S1	Application Rate Sensor, 15 ft. Cable (360 pulse per rev)
46436-1500S1	Application Rate Sensor, 18 ft. Cable (180 pulse per rev)
46436-0177S1	Application Rate Sensor, 22 ft. Cable (360 pulse per rev)
46436-0172S1	Application Rate Sensor, 30 ft. Cable (360 pulse per rev)
46436-1510S1	Application Rate Sensor, 30 ft. Cable (180 pulse per rev)
45714-1810	Application Rate Sensor Mounting Hardware (includes 1 in. coupler)
45714-1850	Application Rate Sensor Mounting Hardware (includes 1 1/4 in. coupler)
21016-0009	Shaft Coupler 1 in.
46421-1210S1	White Motor Sensor Adapter Cable
45790-1810	Application Rate Sensor Extension Harness, 15 ft.
45790-1811	Application Rate Sensor Extension Harness, 30 ft.
45790-1812	Application Rate Sensor Extension Harness, 45 ft.
46709-2221	Application Rate Sensor to HD4180 Mounting Kit


Housing & Bearing Assy 46436-0161 (46436-0161B when used with 46436-0172D sensor)
Sensor Mounting Bracket 42458
Screw (PNH Tap) 20126-0013
Grating Assy 45714-1750
Stainless Steel Shim, .007 20000-0099
Disk Retaining Washer 45714-1050
360 Slotted Disk 45714-0931
Washer (1/8 in. Thick) 20000-0098
Hex Head Screw (10-32 x 1/2) 20134-0040
Lock Washer (#8) 20065-0012
O-Ring 21028-0040
Nut Seal 45382-2150
Cover Plate 45714-0920
Internal Lock Washer 20032-0007
Circuit Board Assy 46436-0200
Decal 20242-0088
Plastite Screw (#6 x 1/2) 21389-0028
Plastite Screw (#8 x 1/2 SST) 21389-0030
3-Pin WP Connector
Sensor Plate O-Ring 21028-0064
Note: The 46436-0172D sensor uses an undated Housing & bearing assembly and a different shaft seal. Shaft seal (not shown) is 21002-0011

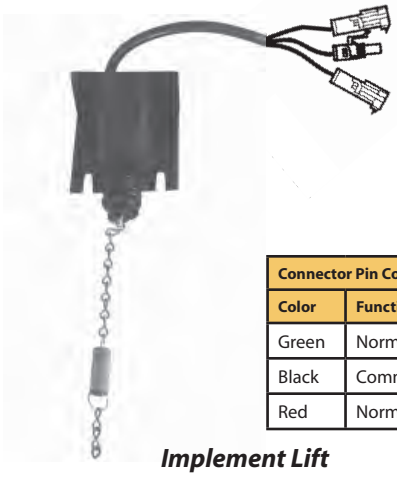
Cable Assy	
1 Ft. Cable	46436-0198
5 Ft. Cable	46436-0196
6 Ft. Cable	46436-0199
10 Ft. Cable	46436-0190
15 Ft. Cable	46436-0191
22 Ft. Cable	46436-0197
30 Ft. Cable	46436-0192

Connector Pin Numbers ID		
Pin No.	Color	Function/Voltage
A	RED	+12V
B	BLK	Gnd
C	GRN	Signal (Pulses)

Connector Pin Numbers ID		
Pin No.	Color	Function/Voltage
A	Red	+12V
B	Black	Ground
C	Green	(Pq) Signal (0-5)



Liquid Pressure



Connector Pin Colors	
Color	Function/Voltage
Green	Normally Open
Black	Common
Red	Normally Closed

Implement Lift

Gate Height

Extension Cable for Hopper Level Sensor, Air Pressure Sensor, Implement Lift Switch

Extension Cable for Flow Meter, Application Rate Sensor, Liquid Pressure Sensor

Liquid Pressure

- Measures 0-650 psi liquid pressure
- Can be used as alternative to flow meter in Land Manager® liquid sprayer control systems
- Reads liquid pressure at nozzle on spray bar
- Prevents over-application caused by single nozzle clogs

Part Number	Description
46570-0010	Pressure Sensor 0-100 psi
46570-0020	Pressure Sensor 0-650 psi
46570-0040	Pressure Sensor 0-225 psi
46570-0070	Pressure Sensor 0-300 psi

Implement Lift

- Enables or disables implement function
- Attaches to three-point hitch or lift cylinder
- Ties to planter monitors and control systems

Part Number	Description
46372-0150S1	Lift Switch with Weather-Pack Connector
45632-1070	Lift Switch with Mate-N-Loc Connector
10842-0001	Lift Switch Extension 30 ft.
46482-0520S1	Lift Switch Whisker Type

Gate Height

- Measures gate height setting in inches
- Automatically adjusts conveyor speed to compensate for gate height changes and maintain application rate
- Accuracy ±0.1 in. of actual gate setting
- Operates with battery supply voltage of +9 to +16 VDC
- Provides +0 to +5 VDC analog signal output
- Potentiometer with working range of 110 degrees of rotation
- Can be mounted on left or right side of gate
- Preassembled, stainless-steel hardware and powder-coated mild steel mounting brackets

Part Number	Description
46649-2370S1	Gate Height Sensor

Extension Cable

Part Number	Description
46682-0713	Extension Cable 5 ft. (Hopper, Air Pressure, Implement Lift)
46682-0712S1	Extension Cable 10 ft. (Hopper, Air Pressure, Implement Lift)
46682-0714	Extension Cable 15 ft. (Hopper, Air Pressure, Implement Lift)
46682-0710S3	Extension Cable 20 ft. (Hopper, Air Pressure, Implement Lift)
46682-0711S3	Extension Cable 40 ft. (Hopper, Air Pressure, Implement Lift)
45790-1810	Extension Cable 15 ft. (Flow Meter, App Rate, Liquid Pressure)
45790-1811	Extension Cable 30 ft. (Flow Meter, App Rate, Liquid Pressure)
45790-1812	Extension Cable 45 ft. (Flow Meter, App Rate, Liquid Pressure)

Continental/TTU

Continental Superflow

Single Thermal Transfer Unit

Features:

- Allows faster runs at lower tank pressures
- Attain flow rates up to 9,600 lb./hr.
- Standard 1 1/4 in. plumbing
- Compatible with N-Serve nitrogen stabilizer
- Interchangeable orificed hose barbs for constant 2% or less vapor bleed off

To determine exchanger kit and valve size use the following formula:
Applicator width X speed X application rate (gpa) X 0.1212
Example:
42.5 ft. X 6 mph X 200 lbs. NH3 X 0.1212 = 6,181 lbs./hr.

NH3 Kit Anhydrous Ammonia Flow Rate Chart

Heat Exchanger Kit *Maximum Flow Rate*	*Valve Size*
Single TTU 4,200 lbs./hr.	3/4 in.
Single TTU 5,500 lbs./hr.	1 in.
Continental Superflow 9,600 lbs./hr.	1 1/4 in.

Selecting a NH3 Heat Exchanger Kit requires:

- Width in feet of the anhydrous tool bar
- Maximum ground speed (mph) the tractor will pull the tool bar
- Maximum application rate of NH3 per acre to be applied

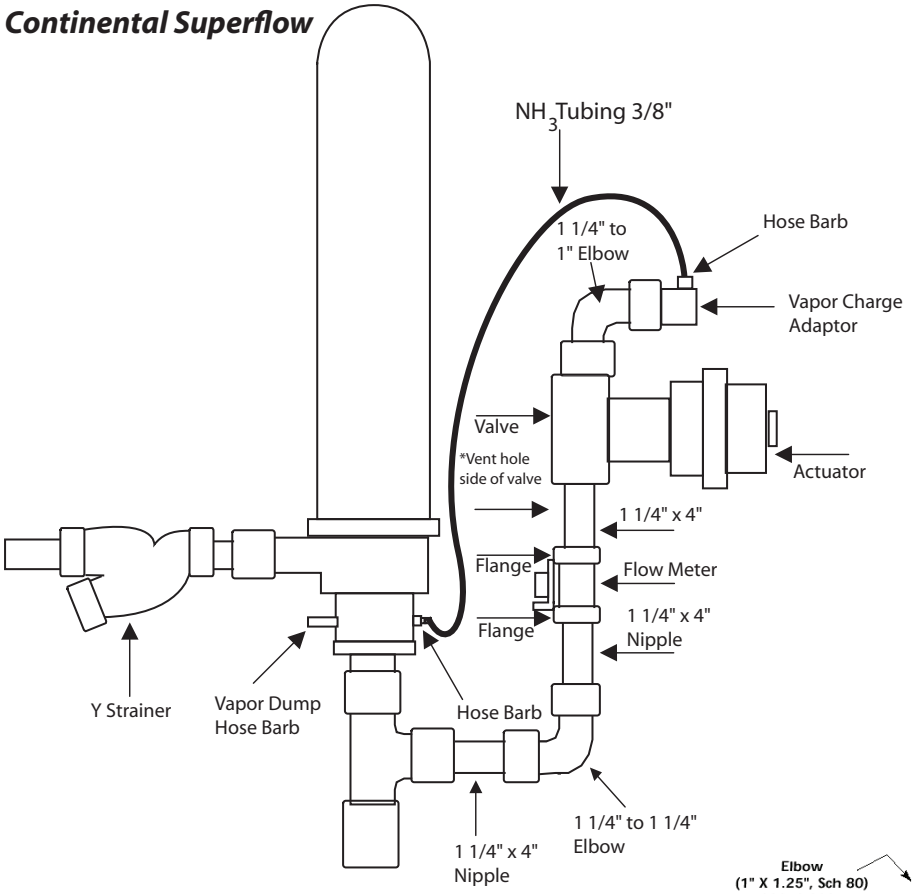
To ensure the highest possible flow rates, applicator plumbing must be sized properly.

LBS/HR	*Plumbing Size*
0-3600	1 in. feed line and breakaway
3600-6800	1 1/4 in. feed line and breakaway
6800-up	1 1/2 in. feed line and breakaway

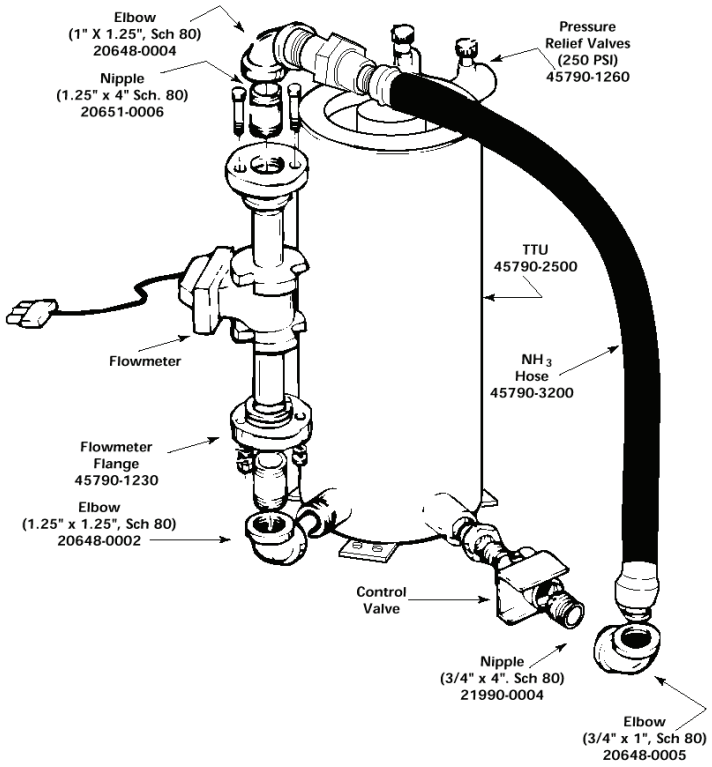
Anhydrous Kits	
Part Number	**Description**
CCSNH3KIT	NH3 Kit TTU with 467095300 3/4 in. Valve & Actuator (4200 lbs/hr)
CCSNH3KIT1	NH3 Kit TTU with 467095040 1 in. Valve & Actuator (5500 lbs/hr)
CONTNH3KIT	NH3 Kit Continental with 457903380 1 1/4 in. Ball Valve and 467095060 Actuator (9600 lbs/hr)
46709-5300	Valve and Actuator 3/4 in.
46709-5040	Valve and Actuator 1 in.
46709-5060	Actuator 1 1/4 in.
46709-6040	NH3 Section Shutoff Control Valve
45790-4000	Hardware Kit Mounting Bracket and Coupler
45790-1610S1	Liquid Flow Meter (Paddle Wheel)

Continental/TTU Diagram

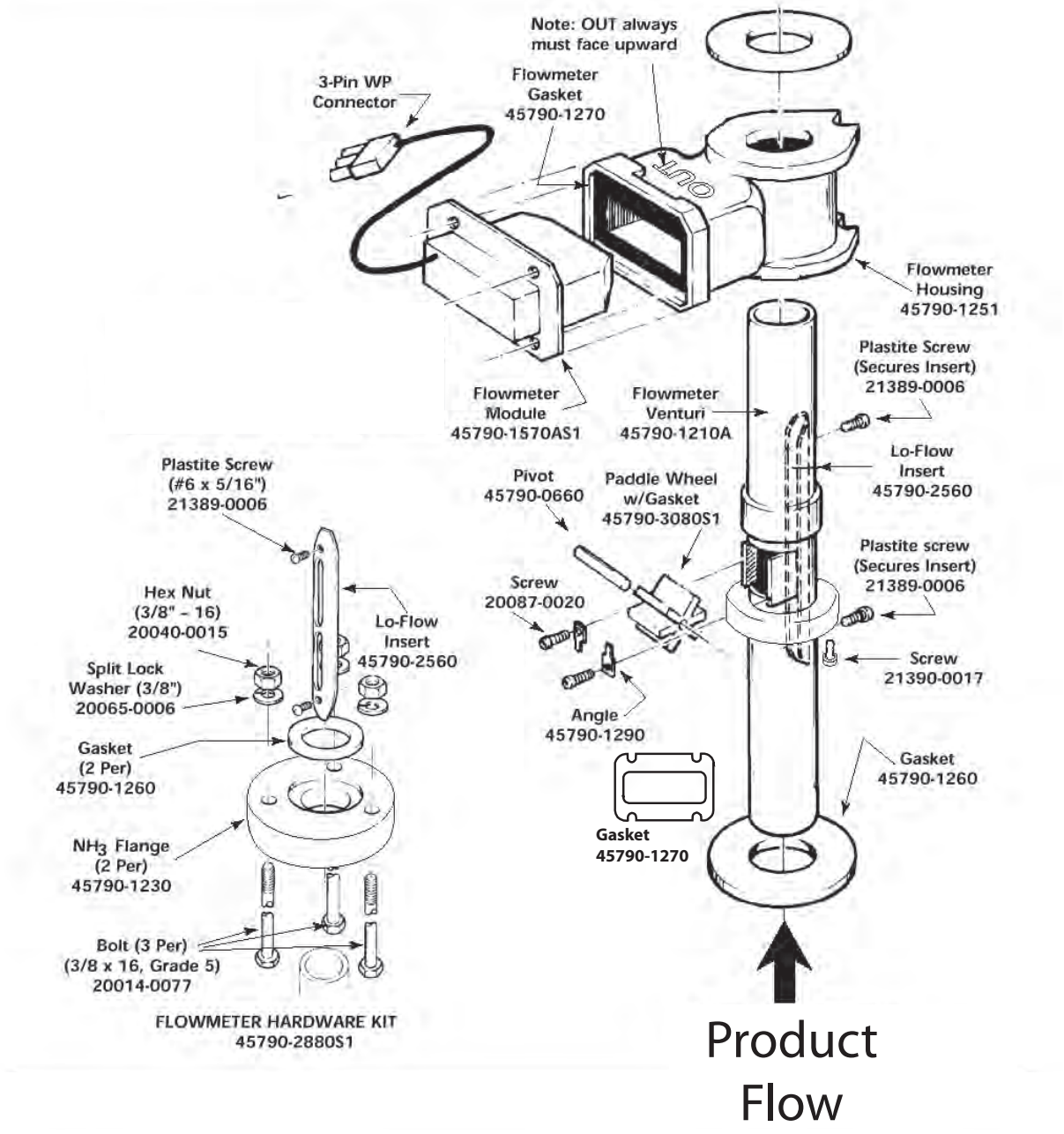
Continental Superflow



Single Thermal Transfer Unit



Liquid Flow Meter (Paddle Wheel)



2 way Stainless Steel Valve with 467095070 Actuator 3/8", 1/2"

2 way Stainless Steel Valve with 467095060 Actuator 1", 3/4", 2"

2 way Stainless Steel Valve with 467095250 Actuator 3"

2 way Poly Valve with 467095070 Actuator 3/4", 1"

Liquid Servo Valve Extension

Liquid

Two-way regulating control valves, stainless steel, available in 3/8 in., 1/2 in., 3/4 in., 1 in., 2 in., and 3 in.

Valve Parts			
Part Number	**Valve Size (Inches)**	**Flow Rate GPM**	**Description**
46709-5010	3/8	6	Stainless Steel Valve, 2 way with 46709-5075 Actuator
46709-5020	1/2	30	Stainless Steel Valve, 2 way with 46709-5075 Actuator
46709-5300	3/4	30	Stainless Steel Valve, 2 way with 46709-5060 Actuator (used with NH3 TTU kit)
46709-5290	1	68	Stainless Steel Valve, 2 way with 46709-5060 Actuator
46709-5150	2	376	Stainless Steel Valve, 2 way with 46709-5060 Actuator
46709-5170	3	720	Stainless Steel Valve, 2 way with 46709-5250 Actuator
46709-6040	3/4		Stainless Steel Valve, 2 way with 46709-6060 Actuator

Two-way Poly regulating control valves available in 3/4 in., 1in.

Valve Parts			
Part Number	**Valve Size (Inches)**	**Flow Rate GPM**	**Description**
46709-5030	3/4	51	Poly Valve, 2 way with 46709-5070 Actuator
46709-5280	1	68	Poly Valve, 2 way with 46709-5070 Actuator

Two-way regulating control valve, carbon steel, available in 1 in.

Valve Parts			
Part Number	**Valve Size (Inches)**	**Flow Rate GPM**	**Description**
46709-5040	1	68	Carbon Steel Valve, 2 way with 46709-5060 Actuator

Liquid Servo Valve Extensions

Part Number	Description
45790-1820	Extension Cable 15 ft. 6 pin WP
45790-1821	Extension Cable 30 ft. 6 pin WP

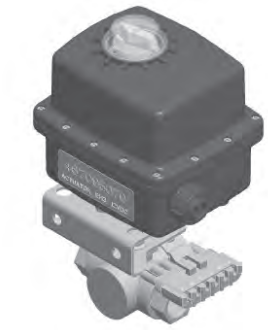
2 way Carbon Steel Valve with 467095060 Actuator 1"

Connector Pin Numbers ID		
Pin No.	**Color**	**Function/ Voltage**
A	Red	+12V
B	Black	Ground (0V)
C	White	Open (0-12V)
D	Green	Close (0-12V)
E	Blue	APER (0-12V)
F	N.C.	

Liquid

Three-way regulating control valve assemblies available in 3/8 in., 1.5 in. , 2 in.

Valve Parts			
Part Number	**Valve Size (Inches)**	**Flow Rate GPM**	**Description**
46709-5220	3/8	3	Stainless Steel Valve, 3 way with 46709-5075 Actuator
46709-5050	1.5	47	Poly Valve, 3 way Poly with 46709-5060 Actuator
46709-5140	1.5	34	Stainless Steel Valve, 3 way with 46709-5060 Actuator
46709-5160	2	47	Stainless Steel Valve, 3 way with 46709-5250 Actuator



3 way Stainless Steel Valve with 467095070 Actuator 3/8"

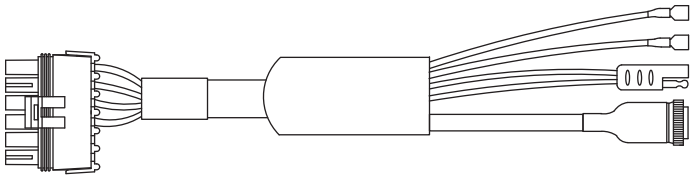
Connector Pin Numbers ID		
Pin No.	**Color**	**Function/Voltage**
A	Red	+12V
B	Black	Ground (0V)
C	White	Open (0-12V)
D	Green	Close (0-12V)
E	Blue	APER (0-12V)
F	N.C.	

3 way Poly or Stainless Steel Valve with 467095060 Actuator 1.5"

Raven Fast Valve Adapter Harness

Adapter Harness	
Part Number	**Description**
46698-0100	Raven Fast Valve Harness Adapter

3 way Stainless Steel Valve with 467095250 Actuator 2"



Raven Fast Valve Adapter Harness 466980100

Single Liquid Shutoff Valve 467096000 3/4"

3 Bank Shutoff Valve 467096010 3/4"

5 Bank Shutoff Valve 467096020 3/4"

Single Shutoff Valve 467096040 3/4"

Single Shutoff Valve 467095130 1"

Single Shutoff Valve 467095320 1/4"

Liquid Boom Shutoff

Liquid Boom Shutoff Valves (on/off) available in 3/4 in. and 1 in.

Actuators Only		
Part Number	**Used With**	**Description**
46709-5260	46709-6000 46709-6010 46709-6020	Actuator Assembly EH5 On/Off
46709-6030	46709-5130 46709-6040 46709-5320	Actuator Assembly Shutoff Valve

NH3 Shutoff Valves

Valve Assemblies			
Part Number	**Valve Size (Inches)**	**Flow Rate GPM**	**Description**
46709-6000	3/4	40	Single Shutoff Valve and Actuator
46709-6010	3/4	38	3 Bank Shutoff Valve and Actuator
46709-6020	3/4	38	5 Bank Shutoff Valve and Actuator
46709-5130	1		Single Shutoff Valve and Actuator
46709-5320	1/4		Single Shutoff Valve and Actuator
46709-6040	3/4		Single Shutoff Valve and Actuator

Boom Shutoff Valve Fittings		
Part Number	**Hose Size (Inches)**	**Description**
46709-7020	1/2	Boom Shutoff Valve Fitting, straight
46709-7030	1/2	Boom Shutoff Valve Fitting, 90 degree
46709-7040	3/4	Boom Shutoff Valve Fitting, straight
46709-7050	3/4	Boom Shutoff Valve Fitting, 90 degree
46709-7060	3/4	Boom Shutoff Valve Fitting, female NPT
46709-7070	1	Boom Shutoff Valve Fitting, straight
46709-7080	1	Boom Shutoff Valve Fitting, 90 degree
46709-7090	1	Boom Shutoff Valve Fitting, male NPT

467097020

467097030

467097040

467097050

467097060

467097070

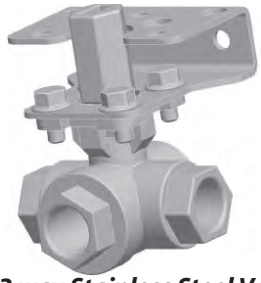
467097080

467097090

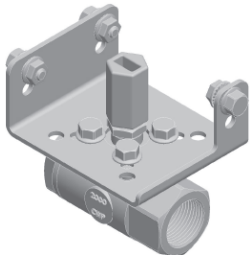
Valve Body w/o Actuator

Valve body without actuator available in 3/8 in., 1/2 in., 3/4 in., 1 in., 1.5 in., 2 in., and 3 in.

Valve Parts		
Part Number	**Valve Size (Inches)**	**Description**
46709-5080	3/8	Stainless Steel Valve, 2 way
46709-5230	3/8	Stainless Steel Valve, 3 way
46709-5090	1/2	Stainless Steel Valve, 2 way
46709-5310	3/4	Stainless Steel Valve, 2 way
46709-5100	3/4	Poly Valve, 2 way
46709-5110	1	Carbon Steel Valve, 2 way
46709-5180	1	Poly Valve, 2 way
46709-5120	1.5	Poly Valve, 3 way
46709-5190	1.5	Stainless Steel Valve, 3 way
46709-5200	2	Stainless Steel Valve, 2 way
46709-5210	2	Stainless Steel Valve, 3 way
46709-5240	3	Stainless Steel Valve, 2 way
46709-5290	1	Stainless Steel Valve, 2 way



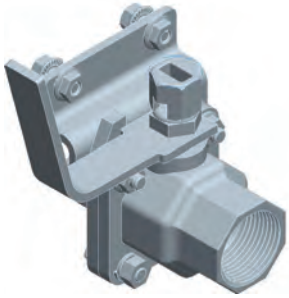
3 way Stainless Steel Valve 3/8"



2 way Stainless Steel Valve 3/8", 1/2", 3/4", 1"

2 way Poly Valve 3/4", 1"

3 way Poly Valve 1.5"

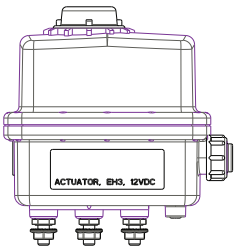


2 way Carbon Steel 1"

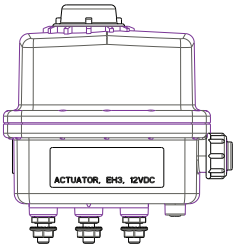
2 way Stainless Steel Valve 2", 3"

3 way Stainless Steel Valve 1.5", 2"

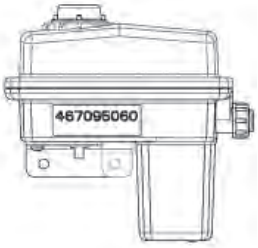
Actuator Assemblies



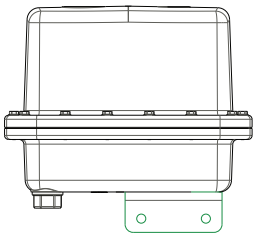
Actuator Assembly
467095070



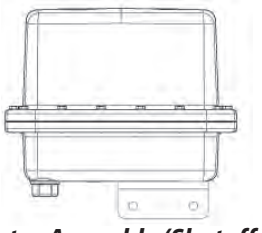
Actuator Assembly
467095075



Actuator Assembly
467095060



Actuator Assembly
467095250



Actuator Assembly (Shutoff Valve)
467095260

Actuators		
Part Number	**Used With**	**Description**
46709-5060	46709-5310 46709-5110 46709-5120 46709-5190 46709-5200	Actuator Assembly EH2 (used with Continental 1.25 in. NH3 valve)
46709-5070	46709-5100 46709-5180	Actuator Assembly EH3
46709-5075	46709-5080 46709-5230 46709-5090	Actuator Assembly EH3
46709-5250	46709-5210 46709-5240	Actuator Assembly EH5
46709-5260	46709-6000 46709-6010 46709-6020	Actuator Assembly EH5 On/Off
46709-6030	46709-5130	Actuator Assembly Shutoff Valve

Adaptor Bracket and Coupler (for use with Continental 1.25 in. NH3 Valve)	
Part Number	**Description**
46709-7000	EH2 Actuator to Continental NH3 Valve Bracket (used to mount EH2 actuator on 1.25 in. valve)
46709-7010	EH2 Actuator to Continental NH3 Valve Coupler (used to mount EH2 actuator on 1.25 in. Valve)

Adaptor Bracket and Coupler

Proportional Hydraulic Flow

Use with 46421-0430S1 PWM Granular Valve Drive Module

Dual Flow

P4, P8, and P24

Dual Flow

The Dual Flow Spreader Control Valve provides proportional control of the spinner and conveyor/auger motor and can be mounted outside the cab. The valve is a direct replacement for the Fluid Control 2FFL1 2 or equivalent spreader valve and can operate with either a fixed displacement or variable displacement (load sense) pump. Can also run continuously with the spinner circuit shutoff.

SPECIFICATIONS:

- Operating Pressure: Inlet 4,000 PSI
- Regulated Flow Rate: 0-17 GPM or 0-34 GPM auger/conveyor
  0-10 GPM Spinner
- Internal Leakage: 50 cc/min. max at 2,000 PSI
- Coil Voltage: 12 VDC
- Max Control Current: 1,400 ± 100 mA

Part Number	Description
46709-2100	Dual Hydraulic Valve (HydraForce) 17 GPM conveyor/10 GPM spinner, fixed displacement
46709-2101	Dual Hydraulic Valve (HydraForce) 17 GPM conveyor/10 GPM spinner, load sense
46709-2110	Dual Hydraulic Valve (HydraForce) 34 GPM conveyor/10 GPM spinner), fixed displacement
46709-2111	Dual Hydraulic Valve with Load Sense (HydraForce) 34 GPM conveyor/10 gpm spinner)
46709-0421	Replacement Cartridge
46709-0360	Replacement Coil

P4 & P8

P4 and P8 Proportional Flow Control Valves are electrical-variable two-way, pressure-compensated spool valves and can be used with either open or closed-center hydraulics by plugging port 2 of the valve body.

SPECIFICATIONS:

- Operating Pressure: Inlet 3,500 PSI (240 bar)
- Regulated Flow Rate: 0-4 GPM (0-15 LPM) p/n 46709-2004S1
  0-8 GPM (0-30 LPM) p/n 46709-2008S1
- Reverse Free Flow
  Cracking Pressure: 15-20 PSI (1-1.4 bar)
- Internal Leakage: 0.10 GPM (0.38 LPM) at zero current
- Coil Voltage: 12 VDC
- Max Control Current: 1,500 ± 100 mA
- Solenoid operated
- Normally closed when de-energized
- Three port

Part Number	Description
46709-2050S1	Valve Assembly 24 GPM
46709-2004S1	P4 Valve Assembly 4 GPM
46709-2008S1	P8 Valve Assembly 8 GPM
46709-0360S1	Replacement Coil 4 or 8 GPM Valve
46709-0380S1	Replacement Cartridge 4 GPM
46709-0370S1	Replacement Cartridge 8 GPM

HD4180

HD 4180 is a combination hydraulic motor and proportional hydraulic valve used in conjunction with a ground speed control system. It is used on planters and air seeders to rotate the seeding shafts instead of using ground-driven gear boxes. Utilizing hydraulic and ground speed systems allow for manual or variable rate adjustments to the seeding population per acre while moving through the field.

Features:

- 0 - 4 gpm hydraulic flow delivers 4 - 180 rpm at 1,400 inch pounds of torque
- Eliminates ground-drive systems to rotate seeding shafts
- Install up to four units in series to control multiple planter sections or fertilizer application
- Interface with a ground speed control system for variable rate control of planter and fertilizer application in the field.
- Manual override of hydraulic flow in the event of electrical failure.

HD4180	
Part Number	**Description**
46709-2200S1	HD4180 Hydra Drive
46709-2219S1	HD4180 Mounting Bracket with Hardware
46709-2218	HD4180 Planter Mounting Hardware Kit only
46709-2219	Mounting Bracket only
46709-2221	ARS to Motor Coupler
46798-0470	Extension Cable 15 ft.
46798-0471	Extension Cable 20 ft.
46798-0473	Extension Cable 30 ft.
46798-0472	Extension Cable 40 ft.
46709-0360	Replacement Coil
46709-0380	Replacement Cartridge
46709-2200	Replacement Motor
46709-2219S1 46709-2214 46709-2215 46709-2216 46709-2217 46709-2218 46709-2219	Mounting Bracket with Hardware includes: * 18 tooth Hydradrive Motor Sprocket * Hydradrive 14 Tooth Idler Sprocket * Hydradrive Spacer * 7x7 Square U-Bolt * Hardware Kit for 467092219S1 * Mounting Bracket for 467982200 (Planters)

Calculating Flow Rate Requirements

Granular Spreading/Drill and Air Seeders

(Hydraulic Oil Flow)

To calculate the hydraulic oil flow requirements to select the optimal hydraulic control valve used with a hydraulic motor, use the below formula:

Hydraulic Oil Flow Rate Formula (assumes 1:1 gear ratio)**: (Hydraulic motor in3/rev x Motor RPM required divided by 231)**

IN3/REV Motor Spec	Max Motor RPM Required for Application	Constant IN3 in 1 Gallon	Oil GPM Required
41.2	120	/231	21

(Hydraulic Motor RPM)

To calculate the motor RPM required to achieve maximum application rate, enter value for pounds per 1 revolution, maximum application rate, ground speed, and spread width. (assumes 1:1 gear ratio)

Pounds discharged from Vbox spreader per 1 Rev. of the conveyor belt drive shaft.	Max. Application Rate (lbs/acre)	Ground Speed (MPH)	Spread Width in Feet	Max. Motor RPM Required for Application (B /A)
10	1200	10	40	97

CONSTANT VALUES USED IN FORMULA (DO NOT CHANGE)

Square Feet in 1 Acre 43560
1 Mile 5280
Distance (feet) traveled per minute at ground speed stated in table above ..... 880 = (MPH x 5280) / 60
A - Time required to apply material on 1 acre at ground speed stated in table above.1.2375 = 43560 / (dist travel x spread width)
B - Conveyor shaft revolutions required to apply maximum application rate ..... 120 = max. application rate / pounds discharged

Row Crop Planter

(Hydraulic Oil Flow)

To calculate the hydraulic oil flow requirements to select the optimal hydraulic control valve for use with a hydraulic motor, use the below formula:

Hydraulic Oil Flow Rate Formula (assumes 1:1 gear ratio): **(Hydraulic motor in3/rev x Motor RPM required divided by 231)**

IN3/REV Motor Spec	Max Motor RPM Required for Application	Constant IN3 in 1 Gallon	Oil GPM Required
5	82	231	1.8

(Hydraulic Motor RPM)

To calculate the motor RPM required to achieve maximum application rate, enter values for seeds dropped per 1 rev. of planter row unit, max. application rate, ground speed, and row spacing.

Seeds dropped per 1 Rev. of the planter row unit (seeds)	Max. Seeding Rate (seeds/acre)	Ground Speed (MPH)	Spread Width in Feet	Max. Motor RPM Required for Application (B /A)
60	120,000	8	3	97

CONSTANT VALUES USED IN FORMULA (DO NOT CHANGE)

Square Feet in 1 Acre 43560
1 Mile 5280
Distance (feet) traveled per minute at ground speed stated in table above ..... 704 = (MPH x 5280) / 60
A - Time required to apply material on 1 acre at ground speed stated in table above. 20.625 = 43560 / (dist travel x spread width)
B - Planter shaft revolutions required to apply maximum application rate ..... 2000 = max. seed rate / seeds dropped per rev.

Hydraulic Servo

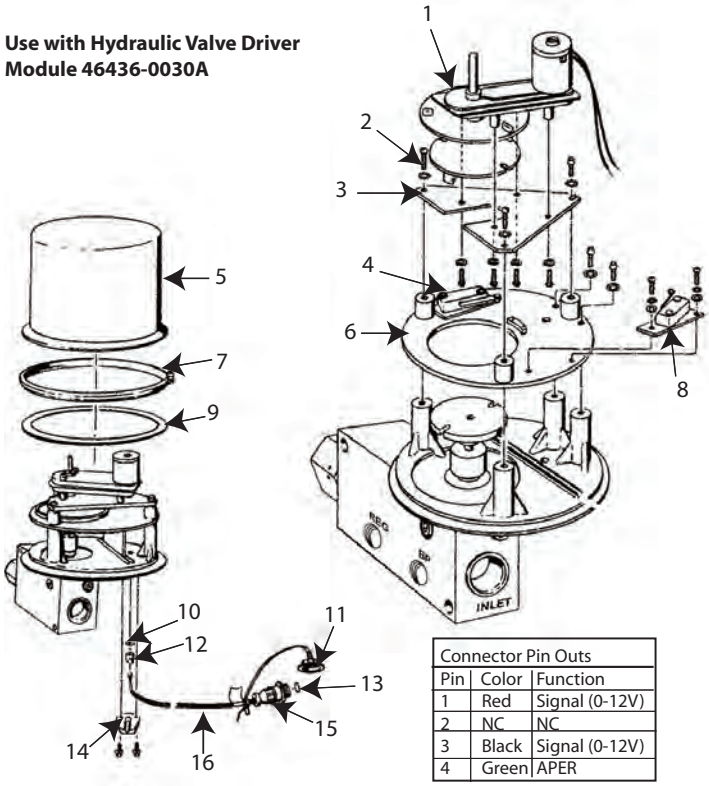
Servo Hydraulic Flow Control Valves are used for precise oil flow to hydraulic-driven conveyors and liquid pumps.

Features:

- Close to open in 1.5 seconds
- Environmentally sealed
- Drives 3/8 to 1 in. liquid and NH3 control valves

Hydraulic Servo Flow Control	
Part Number	**Description**
15557-0001	Hydraulic Valve & Actuator 20 ft. cable 30 gpm
15557-0002	Hydraulic Valve & Actuator 10 ft. cable 23 gpm
15557-0003	Hydraulic Valve & Actuator 20 ft. cable 9 gpm
15557-0004	Hydraulic Valve & Actuator 20 ft. cable 18 gpm
15557-0006	Hydraulic Valve & Actuator 20 ft. cable 5 gpm
15557-0007	Hydraulic Valve & Actuator 10 ft. cable 30 gpm
15557-0009	Hydraulic Valve & Actuator 20 ft. cable 28 gpm
15557-0011	Hydraulic Valve & Actuator 20 ft. cable 13 gpm
15557-0013	Hydraulic Valave & Actuator 20 ft. cable 16 gpm
15557-0015	Hydraulic Valve & Actuator 20 ft. cable 25 gpm
15557-0016	Hydraulic Valve & Actuator 20 ft. cable 20 gpm
15557-0017	Hydraulic Valve & Actuator 30 ft. cable 30 gpm
15557-0018	Hydraulic Valve & Actuator 11 ft. cable 10 gpm
15557-0021	Hydraulic Valve & Actuator 20 ft. cable 11 gpm

Use with Hydraulic Valve Driver Module 46436-0030A



Connector Pin Outs		
Pin	Color	Function
1	Red	Signal (0-12V)
2	NC	NC
3	Black	Signal (0-12V)
4	Green	APER

Item	Part Number	Description
1	44506-0001	Motor and Coupling
2	45714-0170	Center Coupling
3	45714-0180	Mounting Plate
4	45675-4023	Switch Assembly (black)
5	42282-0002	Valve Cover
6	45714-0120	Center Plate
7	21034-0002	Clamp
8	45675-4022	Switch Assembly (red)
9	42148-0004	Seal
10	21028-0023	O-ring
11	42147-0001	Dust Cover
12	44313-0001	Retainer
13	21093-0001	Seal Ring
14	44316-0001	Clamp
15	11059-0008	Connector Kit
16	43940-0021	Cable complete 10 ft.
	43940-0022	Cable complete 20 ft.
	43940-0023	Cable complete 30 ft.

The system must be in operation to make adjustments. Both adjustments are located under the center plate.

CAUTION: Be cautious to not overspeed the hydraulic motor.

Adjustment 1 (To eliminate creep)

1. Loosen the Allen head screw (large) in the coupling collar.
2. Using pliers, rotate the valve stem until creep stops to establish a closed position.
3. Retighten the collar.

Adjustment 2 (Adjust maximum flow rate gpm)

1. Loosen the small Allen head screw in the orifice adjustment collar.
2. Using pliers, turn the orifice adjustment collar counterclockwise to increase flow; clockwise to decrease flow.
3. Retighten orifice collar screw.

Hydraulic Valve Driver Module

Hydraulic Valve Driver 46436-0030A

Servo Hydraulic Flow Control Valves are used for precise oil flow to hydraulic-driven conveyors and liquid pumps.

Features:

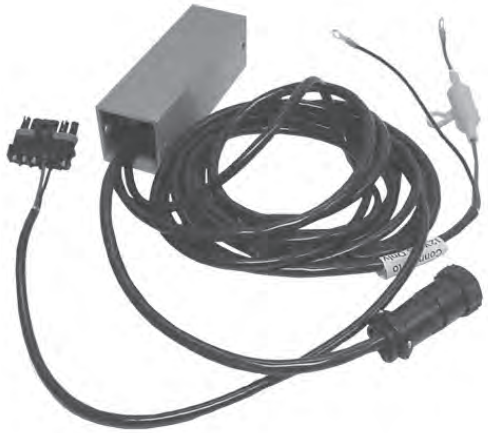
- Close to open in 1.5 seconds
- Environmentally sealed

Hydraulic Servo Flow Control	
Part Number	**Description**
46436-0030A	Hydraulic Servo Valve Driver
43940-0026	Hydraulic Valve Extension 10 ft.
46421-0431S1	PWM Hydraulic Valve Driver
46436-0030A	Hydraulic Valve Driver

6 pin WP Connector Pin Numbers ID		
Pin No.	**Color**	**Function/ Voltage**
A	Red	+12V
B	Black	Ground (0V)
C	Brown	Open (0-12V)
D	White	Close (0-12V)
E	Gray	APER (0-12V)
F	N.C.	

Amp CPC Connector Pin Numbers ID		
Pin No.	**Color**	**Function/ Voltage**
1	Yellow	Signal (0-12V)
2	N.C.	
3	Orange	Signal (0-12V)
4	Gray	APER

PWM Hydraulic Valve Driver 46421-0431S1



Linear Valve Driver 46490-0010S1

6 pin WP Connector Pin Numbers ID		
Pin No.	**Color**	**Function/ Voltage**
A	Red	+12V
B	Black	Ground
C	Brown	ACTR1 (PWM)
D	White	ACTR2 (PWM)
E	Gray	APER
F	N.C.	

2 pin WP Connector Pin Numbers ID		
Pin No.	**Color**	**Function/ Voltage**
A	Red	ACTR1/ACTR2 (PWM)
B	Black	Ground

6 pin WP Connector Pin Numbers ID		
Pin No.	**Color**	**Function/ Voltage**
A	Red	+12V
B	Black	Ground
C	Brown	ACTR1 (PWM)
D	N.C.	
E	N.C.	
F	N.C.	

Amp CPC Connector Pin Numbers ID		
Pin No.	**Color**	**Function/ Voltage**
1	Green	Signal (0-12V)
2	Black	Ground
3	N.C.	

Daisy Chain Sensor

Daisy Chain Module

Daisy Chain Blockage Detection System

The Daisy Chain blockage detection system monitors seed and fertilizer flow on air seeder applications to determine if distribution hoses are open or blocked. Sensors are connected to each other in a serial chain layout contained within the loop.

The system is designed with redundant communication between sensors so that any defective sensor within the system does not shutdown the entire blockage system. Blockage full screen alarms quickly pinpoint exact sensor blockage, communication, or wiring issues to remove guesswork from troubleshooting.

One module can connect to 1 or 2 loops. A maximum of 4 modules and 8 loops connect to sensors that communicate blockage and system status for display on the virtual terminal.

The blockage system is compatible with any ISO virtual terminal including DICKEY-john, Case, John Deere, and AGCO terminals.

Features:

- Monitors up to 4 modules and a total of 8 loops
- Each module can interface with a maximum of 2 sensor loops
- Maximum number of sensors per loop is 54 for a total of 432 sensors
- Full screen alarms pinpoint blockage or system issues for quick resolution
- Bi-directional communication lines between sensors and modules
- System can continue to monitor sensor blockage with 1 line failure
- Three system tests (communication, power, and sensor) provide immediate feedback of system status)
- Additional rows and blockage sensors can be added later with minimal harnessing changes

Daisy Chain Blockage Detection System	
Part Number	**Description**
46798-8670	Sensor
46798-8690	Sensor Module

Daisy Chain Blockage Detection System

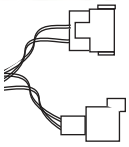
Loop A/B Harness

Module Harness ISO 1 Loop

Module Harness ISO 2 Loop

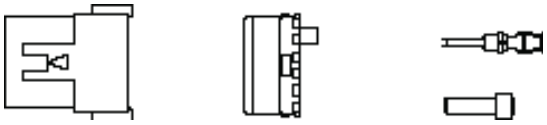
Module Extension Harness 6m or 10m

CAN Bus Adapter Harness



Daisy Chain Blockage Detection System	
Part Number	**Description**
46798-8749	Loop A/B Harness
46798-8720	Module Harness ISO 1 Loop
46798-8749	Module Harness ISO 2 Loop
46798-8741	Module Extension Harness 6 meter
46798-8740	Module Extension Harness 10 meter
46798-8761	Terminator
46798-8759	Lift Switch/Tramline Connector Kit (includes 1 Deutsch connector, 1 Deutsch wedge, 5 Deutsch terminals, and 10 Deutsch cavity plugs)
46798-8751	CAN Bus Adapter Harness with Packard connectors
46798-8752	CAN Bus Adapter Harness with fly wire leads

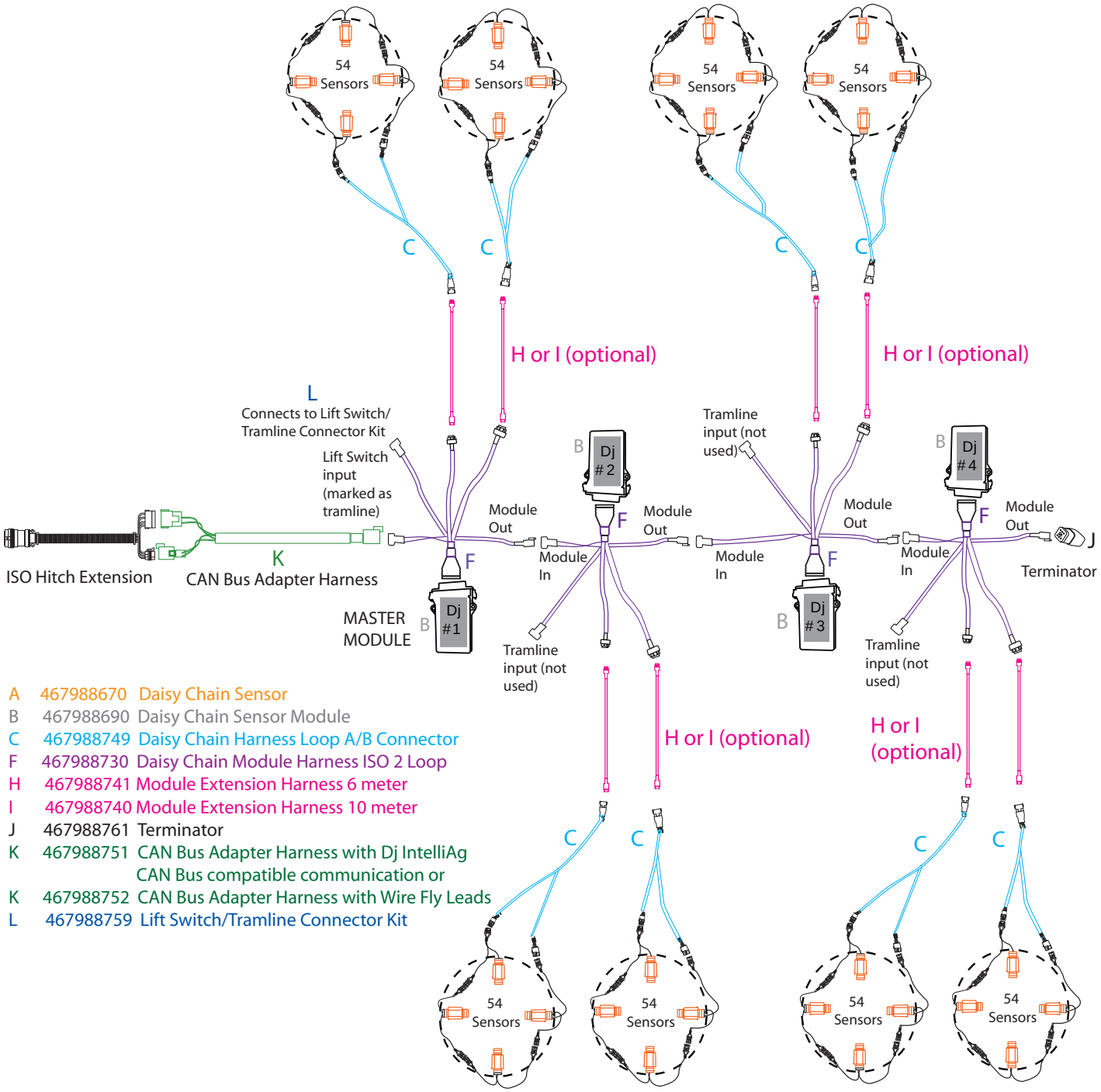
Terminator



Lift Switch/Tramline Connector Kit

Lift Switch/Tramline Connector Kit Pinout	
1	12V Power
2	12V Accessory
3	Accessory Ground Out
4	Accessory Ground
5	Input 5
6	Input 7 Lift Switch
7	Input 3
8	Input 1
9	Ground Speed
10	Input 2
11	Input 4
12	Input 6

4 Module System with 8 Loops and 432 Sensors Daisy Chain System Diagram



A 467988670 Daisy Chain Sensor
B 467988690 Daisy Chain Sensor Module
C 467988749 Daisy Chain Harness Loop A/B Connector
F 467988730 Daisy Chain Module Harness ISO 2 Loop
H 467988741 Module Extension Harness 6 meter
I 467988740 Module Extension Harness 10 meter
J 467988761 Terminator
K 467988751 CAN Bus Adapter Harness with Dj IntelliAg CAN Bus compatible communication or
K 467988752 CAN Bus Adapter Harness with Wire Fly Leads
L 467988759 Lift Switch/Tramline Connector Kit

ASMII Air Seeder

The ASMII Air Seeder Monitor alerts when the seeding rate falls below a programmable seeds per second threshold. The system monitors blockage up to 128 rows or 120 rows and 8 hopper level sensors.

ASMII

16 Row Module

Features:

- Input from 16 sensors or 15 sensors and one hopper level sensor
- Internal audible alarm
- LED dimming for day or night use
- Planting indicator
- Alarm recognition override
- Implement lift switch input
- Module and sensor self test

Part Number	Description
Console and Module	
46794-2002S1	Console and Harness
46794-2057S1	Input Module, 16 row
46794-2058S1	Hopper Input Module, 15 row
Module Harness	
46775-1300S1	Harness, 12 row, 7.5 in.
46775-1301S1	Harness, 12 row, 15 in.
46775-1302S1	Harness, 12 row, 30 in.
46775-1320S1	Tower Harness, 12 row
46775-1310S1	Harness, 16 row, 7.5 in.
46775-1311S1	Harness, 16 row, 15 in.
46775-1312S1	Harness, 16 row, 30 in.
46775-1330S1	Tower Harness, 16 row
485 Module Extensions	
46775-1200S1	485 Module Extension, 4 ft.
46775-1201S1	485 Module Extension, 6 ft.
46775-1202S1	485 Module Extension, 10 ft.
46775-1203S1	485 Module Extension, 15 ft.
46775-1204S1	485 Module Extension, 20 ft.
46775-1205S1	485 Module Extension, 25 ft.
46775-1206S1	485 Module Extension, 30 ft.
46775-1207S1	485 Module Extension, 40 ft.
46775-1208S1	485 Module Extension, 45 ft.
46775-1209S1	485 Module Extension, 50 ft.

NOTES:

- P1 modules address from end to middle; P2 modules address from middle to end.
- Lift switch is optional.
- Power is not switched through the console due to worst case voltage drop on 128-row system.
- P2 is not required for systems with 4 modules or less (64 rows or less). P1 can drive 4 modules.

Don't forget to select a:

- Seed sensor
- Ground speed sensor
- Hopper level sensor
- Hall-effect sensor
- Flow meter
- Implement lift switch

Vigilense™

Vigilense™ with Stainless Steel Outlet Coupling

Recon Flow

Vigilense™

- Can replace existing sensors that sense material detection via a drilled hole or a flow-thru style
- Easy installation
- Detects all sizes of seeds, granular fertilizers, and pesticides
- Use with air seeders and grain drills
- Optical technology eliminates disturbance of seed flow
- Choose either a standard sensor for seed detection or an added stainless steel insert for fertilizer
- Mounting clamps included

Part Number	Description
46742-0701S1	Sensor 25 mm
46742-0702S1	Sensor 25 mm with Stainless Steel Insert
46742-0711S1	Sensor 32 mm
46742-0712S1	Sensor 32 mm with Stainless Steel Insert
46742-0730S1	Sensor 32 mm with Stainless Steel Outlet Coupling
46742-0720S1	Sensor 45 mm
46742-0721S1	Sensor 45 mm with Stainless Steel Insert

Recon Flow

- Cost-effective blockage detection
- Monitors seed and granular fertilizers and pesticides
- Use with air carts and grain drills

Part Number	Description
46742-0010S1	Recon Flow Sensor

Adapters

Part Number	Description
Sensor Tube Adapters	
46526-0040	JD 750 Sensor Adapter Kit, Rubber Tube Adapters for 4 Sensors
46205-0860S1	Recon Sensor Adapter to 1 1/4 in. Tube
46205-0861	Gray Rubber Sensor Adapter - Recon Sensor

PM Series

The PM Series of Planter Monitors offer:

- Row and ground speed monitoring
- Area and population count
- High and low population warning alarms
- Speed and area modes for quick field assessments
- Data retained in power losses
- Preset parameters for out-of-the-box operation
- Customizable features for advanced operation
- Multiple seed flow display options

PM100

PM100/PM100E

- Monitors 16 rows
- Automatic sensor to detect seed flow
- LED row indicators
- Multiple row failure indicator options

PM100	
Part Number	**Description**
46794-0112S1	PM100E (8 rows)
46794-0111S1	PM100 (16 rows)

PM200E

PM200E/250

- Monitors 12 rows
- Speed area monitoring
- Implement population average (200E)
- Plug-in replacement for other DICKEY-john monitors

PM200	
Part Number	**Description**
46799-2085S1	PM200E Monitor (12 rows)
46799-2090S1	PM250 Monitor (12 rows)

PM300

PM300/300E/332E

- Monitors 16 rows (PM300) or 32 rows (PM332)
- Monitors ground speed, two hopper level sensors, one accessory input (fan, shaft, or flow)
- Pre-programmed planter configurations for easy setup
- Stores 3 planter configurations for split row planters or multiple planters and seeders
- Adjustable target population
- Lift switch input

PM300	
Part Number	**Description**
46799-0200S1	PM300 Monitor (16 rows)
46799-0201S1	PM300E Monitor (16 rows)
46799-0380S1	PM332E Monitor (32 rows)
46799-1060	PM300/400 Accessory Adapter
46799-1240	PM300/400 Accessory Adapter 2 hopper and 1 frequency (shaft, fan, or RPM)

PM400

PM500

PM600

Don't forget to select a:

- Seed sensor
- Ground speed sensor
- Hopper level sensor
- Hall-effect sensor
- Flow meter
- Implement lift switch

PM Series

PM400

- Monitors 36 rows
- Monitors ground speed, two hopper level sensors, one accessory input (shaft RPM, liquid flow meter rate, or fan RPM
- Pre-programmed planter configurations for easy setup
- Stores 3 planter configurations for split row planters or multiple planters and seeders
- Adjustable target population
- Lift switch input

PM400	
Part Number	**Description**
46799-0300S1	PM400 Monitor
46799-1060	PM300/400 Accessory Adapter
46799-1240	PM300/400 Accessory Adapter 2 hopper, 1 frequency (shaft, fan, RPM)

PM500

- Monitors 12 rows
- 12 row tramline (four rows simultaneously)
- Monitors ground speed, 2 hopper level sensors, 3 accessory inputs (shaft RPM, liquid flow meter rate, and fan RPM)
- Right and left marker input
- CAN-based external row shutoff module

PM500	
Part Number	**Description**
46799-0501S1	PM500 Monitor

PM600

- Monitors 64 rows
- 1 accessory input (shaft RPM, liquid flow meter rate, or fan RPM)

PM600 Planter Monitors require the following components to operate: console, bridge module, tractor harness , terminator, sensor interface module.

PM600	
Part Number	**Description**
46804-0600S1	PM600 Monitor 16 row (low power)
46804-0601S1	PM600 Monitor 32 row (high power)
46804-0310	PM600 Tractor Harness 16 row (low power)
46804-0320	PM600 Tractor Harness 32 row (high power)
46804-0220	PM600 Bridge Module
46804-0210	PM600 Sensor Interface Module
46804-0361S1	Terminator

Seed Manager SE

Module

Don't forget to select a:

- Seed sensor
- Ground speed sensor
- Hopper level sensor
- Hall-effect sensor
- Flow meter
- Implement lift switch

Seed Manager SE

The Seed Manager® SE monitors material flow or population up to a total of 96 rows for planter, drills, and air carts. Any combination of modules can be used up to a maximum of 7 modules. Three available modules:

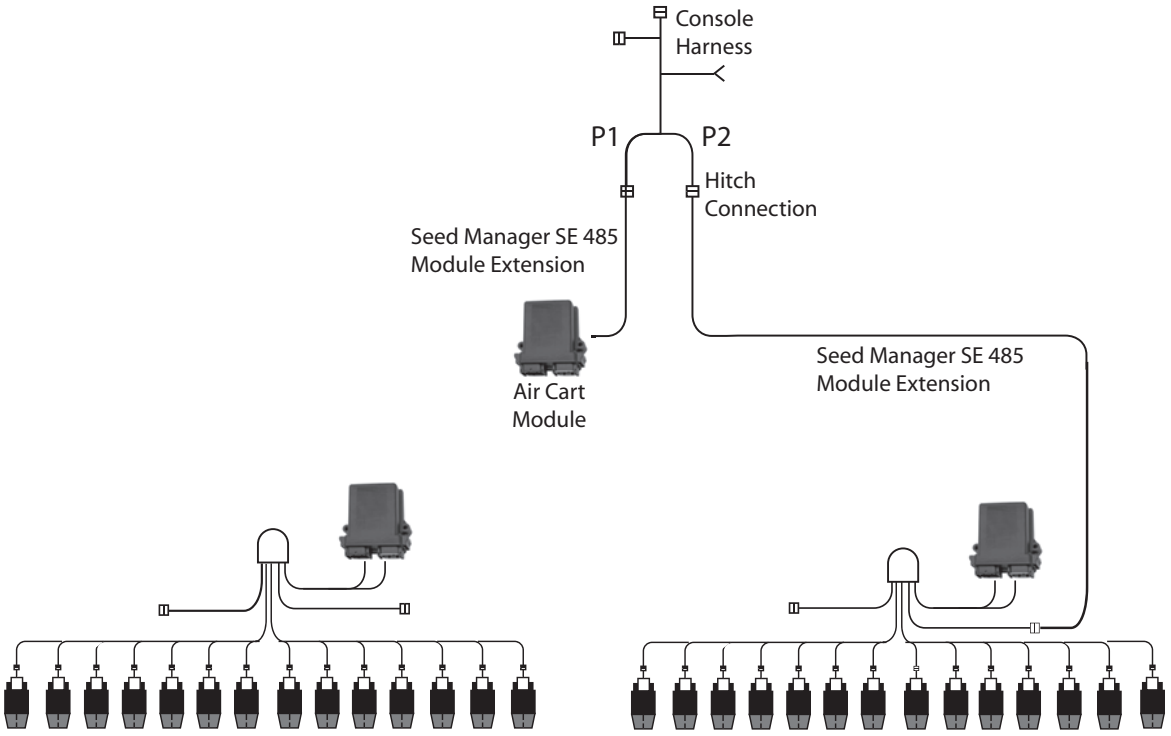
- Material flow with hopper level (12 rows with 2 hopper level inputs)
- Material flow without hopper level (16 rows)
- Air cart (2 fan speed, 3 shaft speed, 2 pressure, 2 hopper inputs)

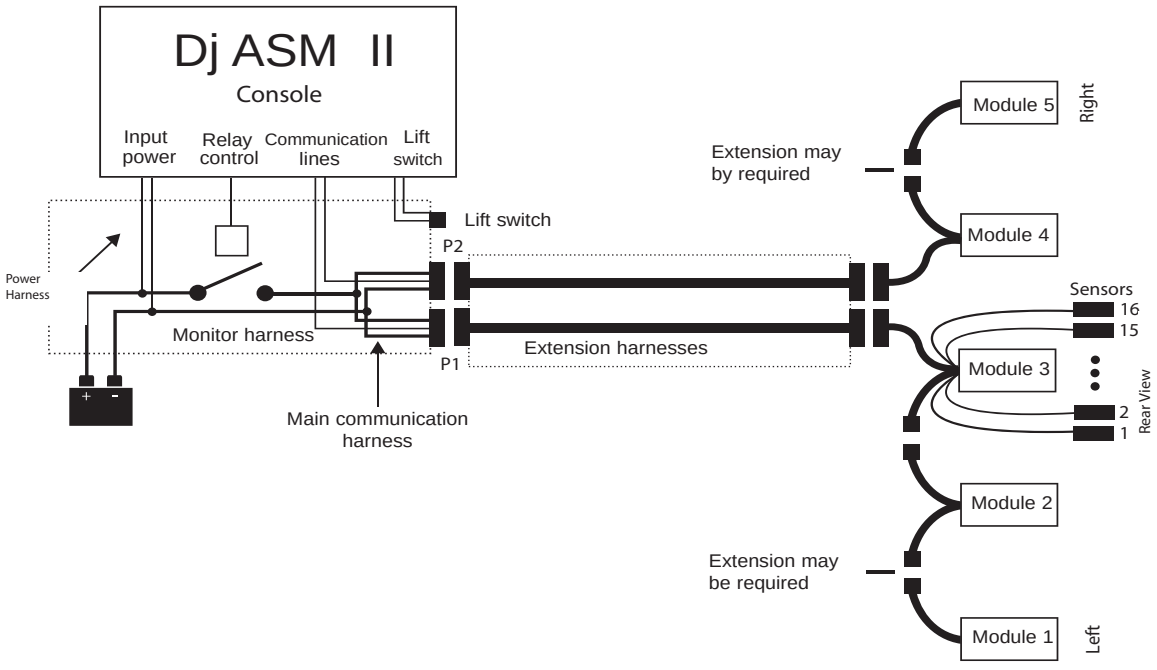
Features:

- Population count for all rows
- Population for the first row in each module and material flow for all other rows
- Acre count
- Population monitoring
- Ground speed monitoring
- Seed spacing monitoring
- Seed count
- RS485 communication modules

Part Number	Description
Console	
46682-2000S1	Seed Manager SE Console
46682-0133S1	Seed Manager SE Console Cab Harness (short)
46682-0134S1	Seed Manager SE Console Cab Harness (long)
Module	
46775-1120S1	2 Hopper Module, 12 row
46775-1130S1	Module, 16 row
46775-2020S1	Aircart Monitoring Module
Implement Harness	
46775-1300S1	Harness, SMSE, 7.5 in., 12 row
46775-1301S1	Harness, SMSE, 15 in., 12 row
46775-1302S1	Harness, SMSE, 30 in., 12 row
46775-1320S1	Tower Harness, SMSE, 12 row
46775-1310S1	Harness, SMSE, 7.5 in., 16 row
46775-1311S1	Harness, SMSE, 15 in.,16 row
46775-1312S1	Harness, SMSE, 30 in.,16 row
46775-1330S1	Tower Harness, SMSE, 16 row
46775-2041S1	Aircart Module Harness
485 Module Extension	
46775-1200S1	Module Extension 4 ft.
46775-1201S1	Module Extension 6 ft.
46775-1202S1	Module Extension 10 ft.
46775-1203S1	Module Extension 15 ft.
46775-1204S1	Module Extension 20 ft.
46775-1205S1	Module Extension 25 ft.
46775-1206S1	Module Extension 30 ft.
46775-1207S1	Module Extension 40 ft.
46775-1208S1	Module Extension 45 ft.
46775-1209S1	Module Extension 55 ft.

Seed Manager Implement Layout





Accessories

Row Shutoff (PM500)

Row Shutoff Module

Row Shutoff Module/Harnesses (PM500)	
Part Number	**Description**
46799-0400S1	Row Shutoff Module
46799-1140	Row Shutoff Harness (12 row)
46799-1100	Row Shutoff Harness (4 row)
46799-1110	Row Shutoff Harness (6 row)
46799-1120	Row Shutoff Harness (8 row)
46799-1130	Row Shutoff Harness (10 row)

Miscellaneous Tubes & Planter Sensors

Planter Sensors	
Part Number	**Description**
45244-1450S1	Sure Rate small grain curved tube and sensor
45244-0971S1	Great Plains Hi Rate tube and sensor
46579-0010S3	Jeantill Plasem tube and sensor
45244-0971	SLC Hi Rate tube and sensor

Sensor Adapters

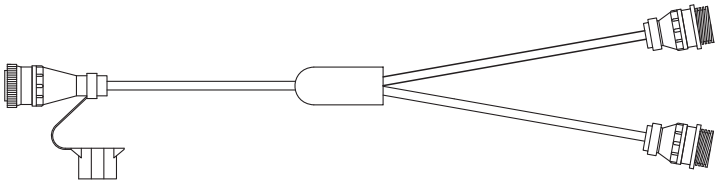
Sensor Adapters	
Part Number	**Description**
45960-0220S2	Sensor Adapter (old harness to new harness)
45960-0170S1	Sensor Adapter (new harness to old harness)
45968-1140	Sensor Adapter (CT harness to new harness)

Console Adapters

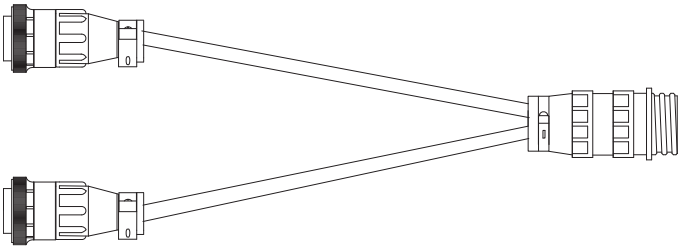
Console Adapters	
Part Number	**Description**
45841-1270	John Deere Harness to DICKEY-john Console Adapter Harness

Accessories

Harnesses

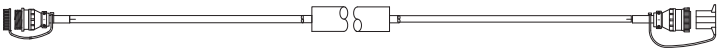


Y Cable



32 Row Reverse Y Harness

Use with single 32 row planter harness splitting rows 1-16 to a PDC-WSMT module and rows 17-32 to a WSMB module.



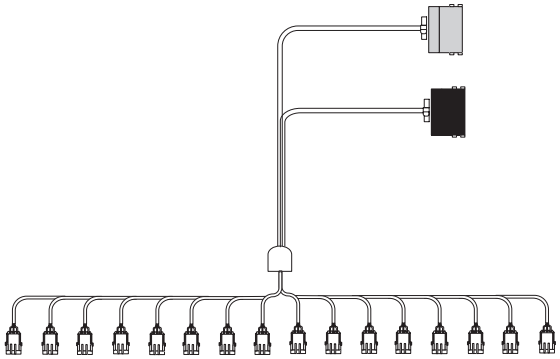
37 Pin Harness Extension

Sensor Extension

Single Row Harnesses 37 Pin CPC		
Part Number	**Rows**	**Description**
45841-0530	4	Planter Harness
45841-0550	6	Planter Harness
45841-0570	8	Planter Harness
45841-0590	12	Planter Harness
45841-1080	16	Planter Harness
45968-0610	8	Y Cable to use 2-4 Row Planter Harnesses
45968-0960S1	12	Y Cable to use 2-6 Row Planter Harnesses
45968-0950S1	16	Y Cable to use 2-8 Row Planter Harnesses
45841-0600	16	2-8 Row Planter Harness with 1-16 Row Y Cable
45968-0940S1	24	Y Cable to use 2-12 Row Planter Harnesses
46799-1320	32	Y Cable to use 2-6 Row Planter Harnesses
46798-0445	32	John Deere Reverse Y Harness
46798-0446	32	Reverse Y Harness
Row Harness Kits 37 Pin CPC		
CASE IH		
45841-0860	12	Horizontal Fold
45968-0321		Harness Extension 30 Ft.
45841-0610	16	Horizontal Fold
Kinze		
45841-0570	8	Econo Fold (6 Ft. Extension required)
45841-0810	16	Harness Extension 6 Ft.
45841-0590	12	Econo Fold (6 Ft. Extension required)
Stacker Bar		
45841-1010	12	Tri-Cable
37 Pin Harness Extensions		
45841-0810	16	Harness Extension 6 Ft.
45968-0320	16	Harness Extension 15 Ft.
45968-0321	16	Harness Extension 30 Ft.
45841-0820S1	32	Harness Extension 15 Ft.
45841-0790S1	32	Harness Extension 30 Ft.
Sensor Extensions		
45968-0920		Sensor Extension 3 Ft.
45968-0923S1		Sensor Extension 4 Ft.
45968-0921		Sensor Extension 6 Ft.
45968-0922		Sensor Extension 15 Ft.

Accessories

Harnesses

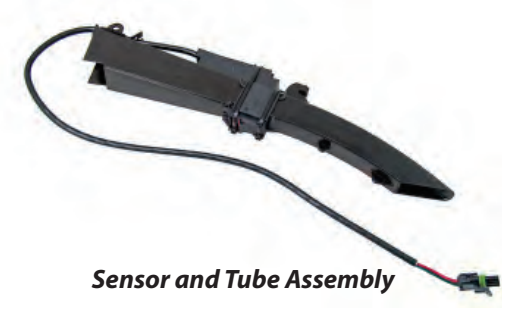


Row Harness SE Style

Sensor Extension

Row Harnesses SE Style RS485 Bus		
Part Number	**Rows**	**Description**
46775-1300S1	12	Harness 7.5 in.
46775-1301S1	12	Harness 15 in.
46775-1302S1	12	Harness 30 in.
46775-1310S1	16	Harness 7.5 in.
46775-1311S1	16	Harness 15 in.
46775-1312S1	16	Harness 30 in.
46775-1320S1	12	Air Cart Harness
46775-1330S1	16	Air Cart Harness
Sensor Extensions		
45968-0920		Sensor Extension 3 Ft.
45968-0923S1		Sensor Extension 4 Ft.
45968-0921		Sensor Extension 6 Ft.
45968-0922		Sensor Extension 15 Ft.

Sensors and Tubes



Sensor and Tube Assembly

Part Number	Description	Compatible With
46514-0040	Small, curved tube; Hi-Rate Sensor	Deere, Kinze, Great Plains
46514-0042	Small, curved tube; blank tube	Deere, Kinze, Great Plains
46153-0522	Small, curved vacuum tube; Hi-Rate Sensor, replaces 46153-0042A	Deere
46153-0062A	Small, straight vacuum tube; Hi-Rate Sensor	Deere
46770-1000S1	Universal Seed Sensor	Universal (potato, sugar cane, and various planters)

Connectors/Tools

Universal Seed Sensor

Connectors & Tools	
Part Number	**Description**
11059-0005	CPC Connector Kit, 37 pin, (harness)
11059-0006	CPC Connector Kit, 37 pin, (console)
11020-0010S1	Pin Extractor, CPC
11020-0013	Pin Extractor, Packard
11020-0002	Crimping Tool, CPC
42259-0003	Dust Cap (CPC Harness Connector)

Miscellaneous

Small Grain Curved Tube with Hi-Rate Sensor 4524440971S1

Small Grain Curved Tube for Hi-Rate Sensor 452440881A

Cyclo Sensor 46164223OS3

Hi-Rate Cyclo Sensor 45491075OS1

Hi-Rate for ASM Planter 467760010S1

Planter Chutes	
Part Number	**Description**
John Deere 1700 Series	
45244-0971S1	Small Grain Curved Tube Hi-Rate
45244-0881A	Small Grain Curved Tube (vacuum) Hi-Rate
45244-0931AS1	Small Grain Straight Tube (vacuum) Hi-Rate
John Deere 7000/7100/7200 Series	
45244-0971S1	Small Grain Curved Tube small Hi-Rate
15135-0008	Small Tube A25925
45244-0881A	Small Grain Curved Tube (vacuum) Hi-Rate
Case IH	
46164-2230S3	400/500/800/900 Cyclo Air
45491-0750S1	800/900 Cyclo Air Hi-Rate
46776-0010S1	Case ASM Hi-Rate (sensor only)
AGCO White	
45244-1010S3	6100 Hi-Rate
Kinze	
45244-0971S1	Hi-Rate (all models)

Requires adapter cable when used with Planter Monitors, Seed Check, and Seed Manager Monitors

Monosem PNU Sensor
454650271

Monosem NG Plus Hi-Rate
452440980

Monosem MS Vegetable
46770010OS1

Monosem NG Plus Meter Mount
467700351S1

Nodet Sensor
453520360S1

Miscellaneous

Planter Chutes	
Part Number	**Description**
Monosem	
45465-0271	PNU Sensor (runner opener)
45244-0980	NG Plus Hi-Rate
46770-0100S1	MS Vegetable (requires modified shoe)
46770-0090S1	Mecca 2000
46770-0351S1	NG Metermount Sensor
Nodet	
45352-0370S1	Planter II
45352-0360S1	Nodet Chute and Sensor (Weather Pack connector)
45352-0350S1	Nodet Sensor only (Weather Pack connector)
Stanhay	
46770-0220S1	Stanhay Dart II

High-Rate Grain Drill

- Delivers improved population counts
- Detects small seeds such as milo, beets, and cotton
- Compatible with many grain drill brands

Part Number	Description
46526-0010S1	Hi-Rate Drill Sensor

Hi-Rate Grain Drill
465260010S1

Flow Meters

1/2" Low Flow Meter

Nylon Flow Meter

Pony Flow Assembly

Poly/Stainless Steel/Nylon

Available in poly or stainless steel for spraying applications.

Features:

0.75-2 in. poly flow meter assemblies include:

- Flow meter body with turbine, axle, and bearings
- Hall-effect sensor with 3-pin Weather Pack connector
- Hose barbs for inlet and outlet
- Viton o-rings
- Coupling nuts

3-4 in. poly flow meter assemblies include:

- Flow meter body with turbine, axle, and bearings
- Hall-Effect sensor with 3-pin Weather Pack connector
- Flanges with Viton o-rings for inlet and outlet
- Flat flanges (no o-rings)

Flow Meters (Stainless Steel)		
Part Number	**Description**	**Flow Rate (GPM)**
PMNPT70116S1	Flow Meter NPT Threads 0.5 in.	.79 - 7.9
PMNPT70121S1	Flow Meter NPT Threads 0.75 in.	1.85 - 18.5
PMNPT70126S1	Flow Meter NPT Threads 2 in.	19.00 - 198
PMNPT70136S1	Flow Meter NPT Threads 1.5 in.	9.25 - 92.5
PMNPT70146S1	Flow Meter NPT Threads 2 in.	19.00 - 198
Flow Meters (Nylon)		
46649-1170S1	GEM Flow Meter with insertable orifice 0.5 in. (output rate of 2,000 pulses per gallon)	0.3-3 w/orifice 0.5-5 w/o orifice
PM00370023S1	Flow Meter Assembly 0.75 in. with 46788-1000S1 Sensors	1.85 - 18.5
PM00370030S1	Flow Meter Assembly 1 in. with 46788-1000S1 Sensor	2.64 - 26.4
PM00370040S1	Flow Meter Assembly 1.5 in. with 46788-1000S1 Sensor	9.25 - 92.5
PM00370048S1	Flow Meter Assembly 2 in. with 46788-1000S1 Sensor	19.00 - 198
PM00370048S2	Flow Meter Assembly 2 in. with 1.5 in. Hose Barbs	19.00 - 198
PM00370068	Flow Meter only 3 in. (no sensor or flanges)	39.6 - 396
PM00370068S1	Flow Meter Assembly 3 in. with Flanges and Sensor with 46788-1000S1 Sensor	39.6 - 396
PM00370088	Flow Meter only 4 in. (no sensor or flanges)	79.0 - 790
PM00370088S1	Flow Meter Assembly 4 in. with Flanges and Sensor	79.0 - 790
Adapter Cable		
46698-0040S1	Raven Flow Meter Adapter Cable	
Miscellaneous		
PM00370001S1	Pony Flow Assembly	

Nylon Parts

Flow Meter Parts (Nylon)	
Part Number	**Description**
PM20005432	Coupling Nut 1.5 in.
PM29300725S1	Turbine 0.5 in.
PM2930899S1	Axle and Bearings 0.5 in.
PM30005132	Coupling Nut 2 in.
PM30301125S1	Turbine .75 in.
PM30304999S1	Sensor only (Poly Flow Meter)
PM30305099S1	Axle and Bearing .75 in.
PM3130925S1	Turbine 1 in.
PM3130199S1	Axle and Bearing 1 in.
PM3230825S1	Turbine 2 in.
PM32302099S1	Axle and Bearings 1.5 in. and 2 in.
PM32302099S1	Axle and Bearings 2 in. and 1.5 in.
PM33302632	Flange with o-ring 3 in.
PM33302732	Flange without o-ring 3 in.
PM3430325S1	Turbine 1.5 in.
PM35300532	Flange with o-ring 4 in.
PM35300632	Flange without o-ring 4 in.
PM65401732	Coupling Nut 0.5 in. (also fit .75 in flow meter)
PM65403132	Hose Barb 0.5 in. (also fits .75 in. flow meter)
PM67401332	Coupling Nut 1 in.
PM67402432	Hose Barb 1 in.
PM80001432	O-ring Viton 0.5 in. (also fits .75 in. flow meter)
PM80002232	O-ring Viton 2 in.
PM80004832	O-ring Viton 1.5 in.
PM80005432	O-ring Viton 1 in.
PM82406532	Hose Barb 2 in.
PM82416432	Hose Barb 1.5 in.

Reluctance Sensor Adapter

Reluctance Sensor Adapter	
Part Number	**Description**
46788-1000S1	Reluctance Sensor Adapter 3 pin Weather Pack
46788-1100S1	Reluctance Sensor Adapter- Rapid Check
46788-1110S1	Reluctance Sensor Adapter, 0.5 in. Flow Meter

Velocity Sensors

Radar III

Connector Pin Numbers ID		
Pin No.	**Color**	**Function/Voltage**
1	Black	Ground
2	Green	Signal (Sq. Wave)
3	Red	+12V
4		N.C.

Radar II

4 to 1 Adaptor

Universal Speed Sensor and Magnet Kit

Connector Pin Numbers ID		
Pin No.	**Color**	**Function/Voltage**
1	Black	Ground
2	Green	Signal (Sq. Wave)
3	Red	+12V
4		N.C.

Radar III

The Radar III Velocity sensor views ground surface for accurate ground speed detection.

Features:

- Compact
- Weighs only 1 lb.
- Velocity errors of less than or equal to 1-3% (vehicle speed dependent) after infield system calibration
- Can be mounted to view forward or backward from vehicle
- Replacement for Radar II

Radar III	
Part Number	**Description**
46783-1000S9	Radar III with Mounting Bracket
46783-3000S1	Radar III Ground Speed Sensor
46783-0760	Radar Mounting Plate with Hardware
45640-2100	Radar Pipe Mounting Bracket
43940-0024	Radar Extension 10 ft.
43940-0064	Radar Extension 25 ft.
46787-0010S1	4-to-1 Radar Signal Adapter (runs 4 electronic consoles from 1 RVS III)

Radar II

Radar II	
Part Number	**Description**
RVSII	Radar II with Mounting Brackets
45640-1912	Radar II with Ground Speed Sensor only
45640-2090	Flat Radar Mounting Kit
45640-2100	Radar Pipe Mounting Bracket
43940-0024	10 ft. Ground Speed Sensor Extension
46787-0010S1	4 to 1 Radar Signal Adapter

Universal Speed Sensor

An economical, magnetic ground speed sensor kit.

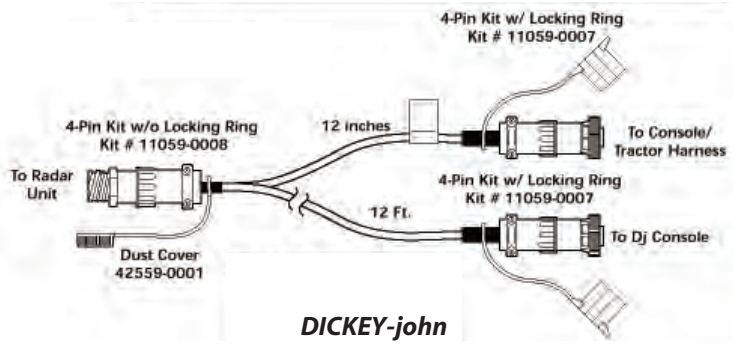
Features:

- Magnets capture wheel rotation speed
- Easy attachment to vehicle axle and wheel
- No sprockets required or alignment with lug nuts

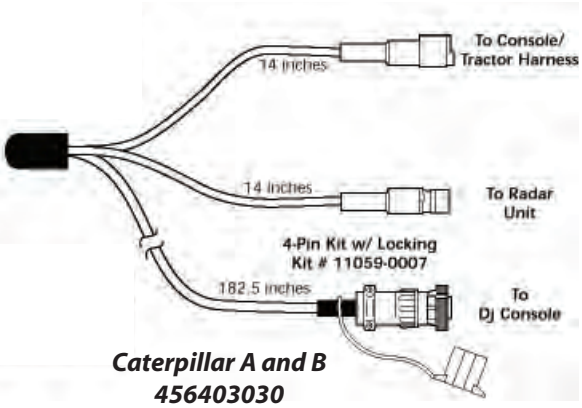
Universal Speed	
Part Number	**Description**
45910-0150	Universal Speed Sensor Kit (sensor, 60 magnets, muffler clamps)
45910-0190	Magnet Kit (60 magnets)
43940-0024	10 ft. Ground Speed Sensor Extension

Sensor Cables

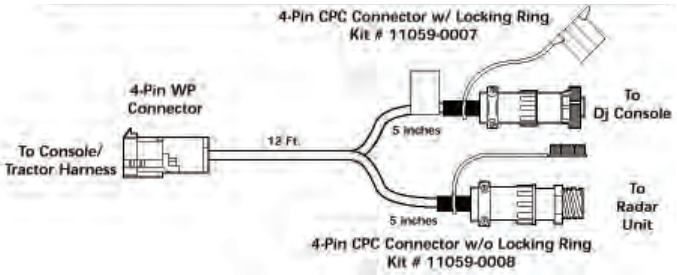
Radar Y



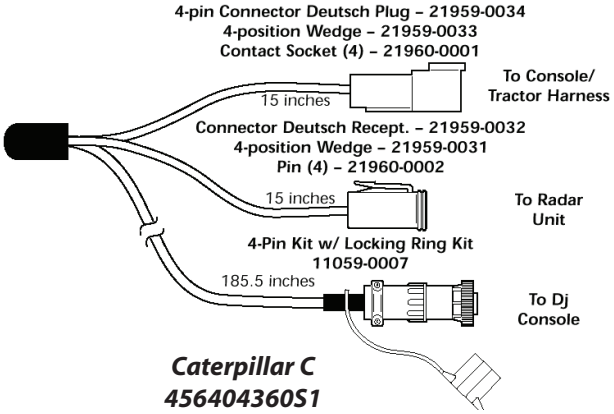
DICKEY-john
152950002



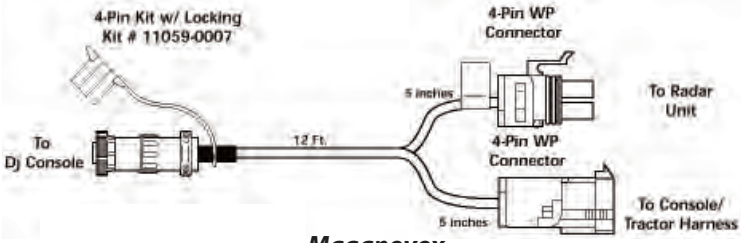
Caterpillar A and B
456403030



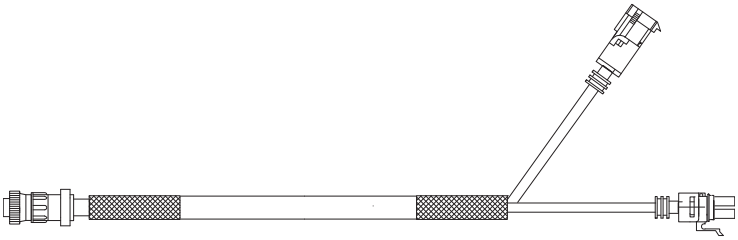
John Deere
45640252OS3



Caterpillar C
456404360S1



Maganovox
45640253OS3



Steiger and Maxum
456404670

Sensor Cables

Radar Y Cross Reference

Case IH

Model #	Y-Cable Part#	Model #	Y-Cable Part #	Model #	Y-Cable Part #
7110 Magnum	15295-0002	5210 Maxum	45640-4670	9210 Steiger	45640-4670
7120 Magnum	15295-0002	5220 Maxum	45640-4670	9230 Steiger	45640-4670
7130 Magnum	15295-0002	5230 Maxum	45640-4670	9240 Steiger	45640-4670
7140 Magnum	15295-0002	5240 Maxum	45640-4670	9250 Steiger	45640-4670
7150 Magnum	15295-0002	MX80	45640-4670	9270 Steiger	45640-4670
7210 Magnum	15295-0002	MX90	45640-4670	9280 Steiger	45640-4670
7220 Magnum	15295-0002	MX100	45640-4670	9310	45640-4670
7230 Magnum	15295-0002	MX110	45640-4670	9330	45640-4670
7240 Magnum	15295-0002	MX120	45640-4670	9350	45640-4670
7250 Magnum	15295-0002	MX130	45640-4670	9370	45640-4670
8910 Magnum	15295-0002	MX150	45640-4670	9380	45640-4670
8920 Magnum	15295-0002	MX170	45640-4670	9390	45640-4670
8930 Magnum	15295-0002	9110 Steiger	45640-4670	STX275	45640-4670
8940 Magnum	15295-0002	9130 Steiger	45640-4670	STX325	45640-4670
8950 Magnum	15295-0002	9150 Steiger	45640-4670	STX375	45640-4670
5110 Maxum	45640-4670	9170 Steiger	45640-4670	STX425	45640-4670
5120 Maxum	45640-4670	9180 Steiger	45640-4670	STX440	45640-4670
5130 Maxum	45640-4670	9190 Steiger	45640-4670	STX450	45640-4670
5140 Maxum	45640-4670				

Caterpillar

Model #	Y-Cable Part #	Model #	Y-Cable Part #	Model #	Y-Cable Part #
65A	45640-3030	65C	45640-4360S1	85D	45640-4360S1
65B	45640-3030	75C	45640-4360S1	65E	45640-4360S1
75B	45640-3030	85C	45640-4360S1	75E	45640-4360S1
35	45640-4360S1	65D	45640-4360S1	85E	45640-4360S1
45	45640-4360S1	75D	45640-4360S1	95E	45640-4360S1
55	45640-4360S1				

John Deere

Model #	Y-Cable Part #	Model #	Y-Cable Part #	Model #	Y-Cable Part #
4455	45640-2520S3	7400	45640-2520S3	7810	45640-2530S3
4555	45640-2520S3	7600	45640-2530S3	8000	45640-2530S3
4755	45640-2520S3	7700	45640-2530S3	8000T	45640-2530S3
4955	45640-2520S3	7800	45640-2530S3	8010	45640-2530S3
4560	45640-2520S3	7210	45640-2530S3	8010T	45640-2530S3
4760	45640-2520S3	7410	45640-2530S3	8300 Series*	45640-4810
4960	45640-2520S3	7610	45640-2530S3	9400 Series*	45640-4810
7200	45640-2520S3	7710	45640-2530S3		
*Note: In-Cab 2 Pin Convenience Plug					

GAC® 2500-UGMA Series

American Society of Agricultural and Biological Engineers AE50 WINNER 2010 outstanding innovations

The GAC® 2500-UGMA Series is a commercial-use grain moisture analyzer that uses 149 MHz analysis technology. 149 MHz technology provides accurate analysis at extreme grain temperatures. This analyzer quickly tests grain and automatically calculates moisture content, temperature, and test weight (density) of the sample.

Software updates, calibrations, and new products can be imported to unit using a USB memory device or direct connection to computer. Calibrations for specialty crops are available such as nuts, sorghum, popcorn, flax, and canola.

Features:

- NTEP certified, FGIS Certified, UGMA compatible
- -4 degrees F to +113 degrees F on grain moisture up to 20%
- Automatic temperature compensation
- Moisture Range 5 to 45% (grain dependent)
- Storage of 3,000 grain tests
- Easy-to-use color touch screen
- Large internal memory capacity
- USB and RS232 serial port connections and ethernet
- External device compatible (keyboard, mouse, printer)
- Optional password protection

Moisture Tester Users:

- Farmers
- Elevators
- Feed Mills
- Livestock Operations
- Seed Companies
- Feed Processors
- Custom Harvesters

Applications:

- Field
- Combine
- Grain Bin
- Grain Dryer

When to use :

- During harvest
- When storing
- Time of sale
- Product processing

GAC2500	
Part Number	**Description**
GAC2500-UGMA	Grain Moisture Analyzer+
Accessories	
46807-1541	Standard Drawer
46807-1542	Bottomless Drawer
20315-0005	220V Power Cord
20315-0002	110V Power Cord
20641-0003	Cleaning Brush
22012-0007S1	Printer Cable Null Modem DB9F to DB25M

GAC® 2100 Series

Federal Standard and NTEP Certified

GAC® 2100b Series

The GAC® 2100 Series delivers accurate and reliable moisture, temperature, and test weight results quickly and consistently for applications including cereals, oil seeds, grass seeds, vegetable seeds, and beans.

Features:

- Measurement through capacitance, conductance, weight
- Testing for a moisture range of at least 5 to 45% grain dependent
- Automatic temperature compensation
- Moisture repeatability of ±0.1% (depending on application)
- Standard RS232 output
- Power supply of 85-264 VAC, 48-62 Hz at 20 VA consumption
- 110/220 VAC

GAC® 2100 GI Series

GAC 2100			
Part Number	**Description**	**# Grain Calibrations**	**Country**
GAC2100AGS9	Grain Moisture Tester	8	U.S.
GAC2100AGIS9	Grain Moisture Tester	8	International
GAC2100BAIS9	Grain Moisture Tester	64	International
GAC2100BAUS9	Grain Moisture Tester	64	Austrian
GAC2100BIS9	Grain Moisture Tester	64	International
GAC2100BRUS9	Grain Moisture Tester	64	Russian
GAC2100BSAS9	Grain Moisture Tester (110V and 220V power cords)	64	International
GAC2100GIS9	Grain Moisture Tester	16	International
GAC2100NBDS9	Grain Moisture Tester	64	U.S.
GAC2100GS9	Grain Moisture Tester	16	U.S.
Accessories			
46422-0420BS1	Drawer		
46716-0400	Doghouse Guard		

GAC® 2100 Agri Series

Doghouse Guard

GAC® 500XT Series

The GAC® 500XT is a compact, cost-effective unit to analyze grain moisture, temperature, and test weight anywhere on the farm with elevator-quality accuracy.

Features:

- Sixteen grain calibration memory
- Grain testing results in 25 seconds
- Automatic moisture and temperature reading
- Approximate test weight reading
- Updatable calibrations
- Semi portable
- ±0.2 moisture repeatability
- More than 450 calibrations available for download
- 110/220 volt, DC converter, or cigarette lighter power sources
- Preloaded with 10 languages (others available)
- Printer port
- Easily transport unit from field to field
- RS232 serial output to printer or data

Moisture Tester Users:

- Farmers
- Elevators
- Feed Mills
- Livestock Operations
- Seed Companies
- Feed Processors
- Custom Harvesters

Applications:

- Field
- Combine
- Grain Bin
- Grain Dryer

When to use :

- During harvest
- When storing
- Time of sale
- Product processing

GAC 500XT	
Part Number	**Description**
GAC500XT	Grain Moisture Analyzer
Accessories	
46795-0155	Power Cord
46795-0480	Drawer

Portable Moisture Testers

mini GAC®

Preprogrammed Calibrations

- Barley 2R
- Barley 6R
- Corn
- Corn Hi
- Durum
- Millet
- Oats
- Rapeseed
- Rye
- Safflower
- Sorghum
- Soybeans
- Sunflower Oil
- Wheat HRS
- Wheat HRW
- Wheat SRW

mini GAC1 LANGUAGES	mini GAC2 LANGUAGES	mini GAC3 LANGUAGES	mini GAC4 LANGUAGES
English US/UK/AU	English US/UK/AU	Russian	English
French	French	Bulgarian	Greek
French Canadian	French Canadian		
German	German		
Italian	Italian		
Spanish	Spanish		
Portuguese	Portuguese		
Dutch	Dutch		
Danish			
Polish			

M3G

mini GAC®

The handheld mini GAC® provides precision, portable moisture testing right in the field delivering "grain-trade" accuracy. Two models are available and equipped with:

- Loader
- 9 volt battery
- Carrying case
- Belt clip

Features:

- Stores up to 20 grain calibrations with more than 450 calibrations available
- Moisture range 5 - 45% (depending on grain type)
- 0.2% moisture repeatability (depending on grain type)
- Internal scale - no preweighing
- USB compatibility for calibration loading
- Test grain hot or cold (32-122º F)
- Menu-driven operating system
- Automatic temperature compensation

Part Number	Description
MINIGAC1	mini GAC Grain Moisture Analyzer (moisture)
MINIGAC1P	mini GAC Grain Moisture Analyzer (moisture and test weight)
MINIGAC2	mini GAC Grain Moisture Analyzer (moisture)
MINIGAC2P	mini GAC Grain Moisture Analyzer (moisture and test weight)
MINIGAC3	mini GAC Grain Moisture Analyzer (moisture)
MINIGAC3P	mini GAC Grain Moisture Analyzer (moisture and test weight)
MINIGAC4	mini GAC Grain Moisture Analyzer (moisture)
MINIGAC4P	mini GAC Grain Moisture Analyzer (moisture and test weight)
46789-0860S1	Funnel Scoop Loader

M3G

The M3G™ portable moisture testers provide high-speed, repeatable moisture testing in a lightweight unit.

- Moisture readings and averages can be stored for up to 10 individual samples
- ±0.5% repeatability with normal stored grain
- No cups or screw-on caps
- Density compensation without weighing or compressing samples

M3G Features:

- Basic moisture testing
- Test up to 3 grains
- Preprogrammed calibrations for corn, soybeans, and wheat

M3G	
Part Number	**Description**
46789-0010S1	M3G Moisture Tester
46789-0140	Pouring Cup

Instalab® 700 NIR Product Analyzer

The Instalab 700 (IL700) is a self-contained optical reflectance instrument designed to quickly and accurately measure the percent of constituent concentration (moisture, protein, oil, starch, fiber, ash, etc.) in a wide range of commodities common to the grain, feed, and food industries. Near Infrared reflectance (NIR) technology within the unit analyzes numerous solid, semi-solid, and liquid materials and is an alternative to wet chemistry. With sufficient calibration data, the Instalab provides accuracy comparable to laboratory results.

Features:

- 110/220 VAC
- Automatic and manual gain selection adjusts the gain for low-reflectance samples
- Thermoelectrically-cooled detector that maximizes sensitivity and dynamic range
- A completely sealed and thermally isolated optics chamber
- An integrated, computerized self-test mode to continuously monitor instrument performance and pinpoint errors
- Non-volatile flash memory stores calibrations and other system parameters

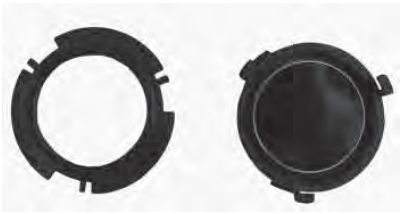
Instalab 700 Series		
Part Number	**Application**	**Description**
IL710		6 filters, 4 customer-selected filters, more than 50 wavelengths for special applications
IL710EP	Ethanol	Special configuration for the DDG market
IL710FG	Flour milling	10 filters, 650 NM optical filter for color measurement, fiber and cellulose determination
IL710FM	General purpose dry milling grain/feed	10 filters, dry milling grain/feeds, 650 NM optical filter
IL710GL	Gluclose	Glucosinolates
IL710MC	NIR Research	10 filters, Food ingredients and grain such as meat, cheese, dairy, poultry, fishmeal, and bonemeal products
IL710SB	Protein/oil in soybeans/wet corn milling	10 filters
IL704	Moisture/ Protein	For wheat, flour, barley, milo, oats type products
IL706		6 filters, moisture, protein, oil/fat, starch, fiber, ash, and other constituents in products such as wheat, corn, soybean, sunflower, rapeseed, barley, milo, oats, alfalfa
IL707FM	General	7 filters, 650 NM optical filter for color measurement, fiber and cellulose determination, dry milling of grain and animal feeds
IL707		Moisture, protein, oil/fat, starch, fiber, ash, and other constituents in products such as wheat, corn, and soybean

Languages:

- English (default)
- Czech
- French
- German
- Hindi
- Hungarian
- Italian
- Japanese
- Polish
- Portuguese
- Romanian
- Russian
- Serbian
- Spanish
- Ukrainian

Applications:

- Grain processing
- Feed processing
- Meat processing
- Textile manufacturing
- Flour milling
- Ethanol production



IL700 Standard Sample Cup

IL700 Liquid Sample Cup

IL700 Open Sample Cup/Holder

IL700 Large Open Sample Cup/Holder

IL700 Sample Tool Accessory Kit

Instalab 700 Accessories

IL700 offers numerous cup styles for a variety of applications. The unit is shipped with the standard cup and tool accessory kit. All other cups are optional.

- Standard cup
- Liquid stainless steel cup for liquid/ethanol material
- Open sample cup for semi-solid (pastes and slurries) and solids (meats and cheeses)
- Large open cup for whole sample-type grain

Instalab 700 Accessories	
Part Number	**Description**
46811-1330	Air Filter
11021-0002	Standard Sample Cup
45592-1650	Open Sample Cup (tray/3 cups)
46803-0100	Liquid Sample Cup Cover (liquid/ethanol)
46803-0110	Liquid Sample Cup Base (liquid/ethanol)
46811-1211	Large Open Sample Cup 4" Holder
46811-1410	Large Open Sample Cup 4"
46811-1440	Sample Tool Accessory Kit (scoopula, handle, 2 brushes, spatula)
20845-0001	Scoopula
20845-0002	Scoopula Handle
21114-0001	#54 Brush 1"
21114-0002	#9501 Brush 3/8"
11021-0005	Spatula

Printer and Accessories

RS232 Printer

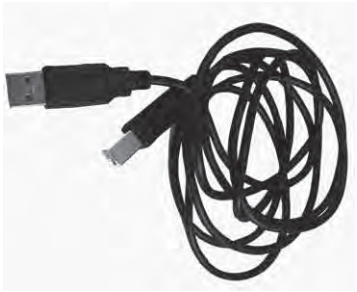
Printer	
Part Number	**Description**
466780011	RS232 Printer

Printer Accessories	
Part Number	**Description**
220120002	Printer Cable 25M to 25M (GAC 2100, 500XT)
220120003	RS232 Cable 9 pin F to 9 pin M (GAC 2500, IL700)
220490001	DB9 Null Modem Adapter 9 pin
220490002	Gender Changer 9 pin
220490003	Null Modem Adapter 25 pin
220120004	USB Type A to B Cable (GAC 2500, mini GAC, IL700)

RS232 Cable (9 Pin Female to 9 Pin Male)

RS232 Cable (25 Pin Male to 25 Pin Male)

Gender Changer



USB Type A to B Cable

Null Modem Adapter

Tester

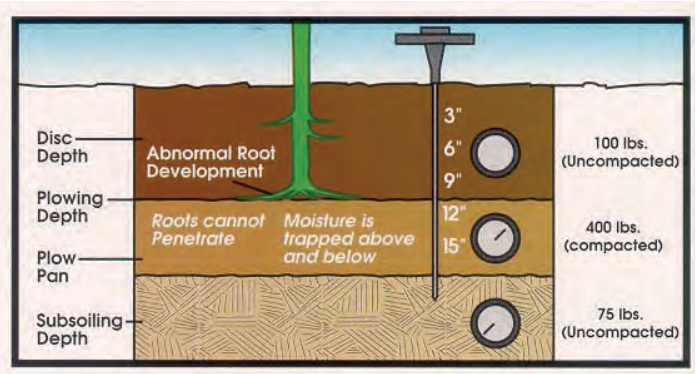
A Soil Compaction Tester is used by pushing into the ground at different locations to find problem areas that can inhibit root growth and reduce yields.

Features:

- Rugged, molded housing and handle
- Color-coded stainless steel dial, liquid filled to reduce shock
- Stainless steel rod with marks every 3 inches to indicate depth

Soil Compaction Tester	
Part Number	**Description**
15585-0003AS1	Soil Compaction Tester
46347-0040	Replacement Tip 1/2 in.
46347-0010	Replacement Tip 3/4 in.

Typical Compaction Situation



Application Rate Sensor

Application Rate Sensor Tester

An Application Rate Sensor Tester quickly tests sensors installed on a vehicle. The tester provides an audible alarm with each degree of rotation from the application rate sensor.

Features:

- Battery operated
- No external power source required

Part Number	Description
45007-0066	Application Rate Sensor Tester

Seed Tester 90

Seed Tester 90

Seed Tester 90 accurately verifies sensor operation.

Features:

- Battery operated
- No external power source required

Part Number	Description
45007-0065S3	Seed Tester 90

Seed Simulator

Seed Simulator

Simulates seed sensor and radar ground speed signals on planters up to 36 rows. Can demonstrate functionality of most DICKEY-john planter monitors (PM100, 200, 300, 400, 500, 600?, 1000, 3000, Seed Manager SE and ASMII). An adapter cable is required to connect to the appropriate planter monitor.

Features:

- Replicates one or all row failure
- Reproduces two seeding rates for both corn and soybeans
- Checks the planter monitor +8 volt supply to the seed sensors and +12 volt supply to radar

Part Number	Description
46790-1000S1	Seed Simulator

Vehicle Ground Speed Simulator 200

Vehicle Ground Speed Simulator

Simulates speed signal input from Radar II and III ground speed sensor ensuring that cabling and console are accepting inputs.

Part Number	Description
45640-4511S1	Vehicle Ground Speed Simulator (VGSS200)

Adapters

An adapter cable is required to connect the planter monitor to the simulator/tester.

PM100 Adapter Cable

PM300 Adapter Cable

PM400 Adapter Cable

ASMII/Seed Manager Simulator Adapter Cable

PM500 Adapter Cable

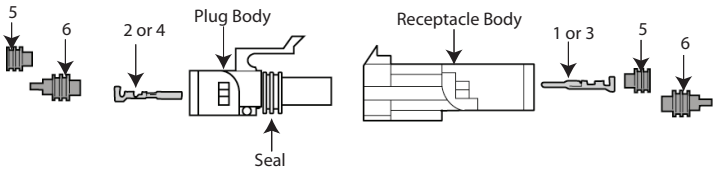
ASMII/Seed Manager Console Adapter Cable

Adapters	
Part Number	**Description**
46790-1010	PM100 Adapter
46790-1020	PM300 Adapter
46790-1030	PM400 Adapter
46790-1040	PM500 Adapter
46790-1050	ASMII/Seed Manager SE Console Adapter
46790-1060	ASMII/Seed Manager SE Simulator Adapter

Connectors

Weather Pack

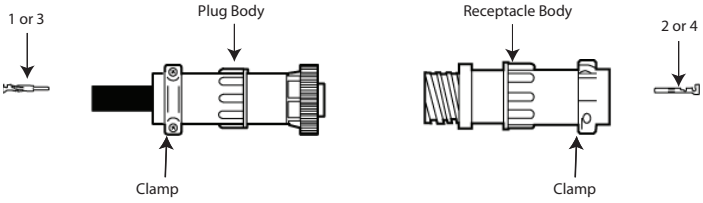
Socket contacts, pin contacts, and seals are the same part numbers for all Weather Pack plugs and receptacles.
Weather Pack connector kits and accessories page 148.



Item	Part Number	Description
1	21896-0001	Pin Contact 18-20 ga.
2	21896-0002	Socket Contact 18-20 ga.
3	21896-0003	Pin Contact 14-16 ga.
4	21896-0004	Socket Contact 14-16 ga.
5	21897-0001	Seal (hole through center) (sealed around wire)
6	21897-0002	Seal (solid center) (seals unused hole)
	21897-0004	Green Plug

AMP

Socket contacts and pin contacts are the same part numbers for all AMP CPC plugs and receptacles.
AMP connector kits and accessories page 150.



Item	Part Number	Description
1	21089-0001	Pin Contact (20-24 ga.)
2	21088-0001	Socket Contact (20-24 ga.)
3	21089-0002	Pin Contact (14-18 ga.)
4	21088-0002	Socket Contact (14-18 ga.)

21894-0007

21894-0008

21894-0009

21895-0007

Metri-Pack

Part Number	Description
21894-0007	2 cavity, Metri Pack, Sealed, Female Connector
21894-0008	2 cavity, Metri Pack, Sealed, Male Connector
21894-0009	2 cavity, Metri Pack, Sealed, Female Connector
21895-0007	2 cavity, Receptacle Body

Connectors & Kits

Part Number	Description
46682-0770S1	**1 Pin Connector Kit**
21894-0001	Plug Body (male)
21896-0002	Socket Contact (18-20 ga.)
21896-0004	Socket Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0250	**2 Pin Connector Kit**
21894-0002	Plug Body (male)
21896-0002	Socket Contact (18-20 ga.)
21896-0004	Socket Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0270	**3 Pin Connector Kit**
21894-0003	Plug Body (male)
21896-0002	Socket Contact (18-20 ga.)
21896-0004	Socket Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0710	**4 Pin Connect Kit, Flat**
21894-0004	Plug Body (male)
21896-0002	Socket Contact (18-20 ga.)
21896-0004	Socket Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0290	**4 Pin Connector Kit, Square**
21894-0005	Plug Body (male)
21896-0002	Socket Contact (18-20 ga.)
21896-0004	Socket Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0730	**6 Pin Connector Kit, Slat**
21894-0006	Plug Body (male)
21896-0002	Socket Contact (18-20 ga.)
21896-0004	Socket Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Weather Pack

Part Number	Description
46682-0770S1	**1 Pin Receptacle Kit**
21895-0001	Receptacle Body (female)
21896-0001	Pin Contact (18-20 ga.)
21896-0003	Pin Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0240	**2 Pin Receptacle Kit**
21895-0002	Receptacle Body (female)
21896-0001	Pin Contact (18-20 ga.)
21896-0003	Pin Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0260	**3 Pin Receptacle Kit**
21895-0003	Receptacle Body (female)
21896-0001	Pin Contact (18-20 ga.)
21896-0003	Pin Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0720	**4 Pin Receptacle Kit, Flat**
21895-0004	Receptacle Body (female)
21896-0001	Pin Contact (18-20 ga.)
21896-0003	Pin Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0280	**4 Pin Receptacle Kit, Square**
21895-0005	Receptacle Body (female)
21896-0001	Pin Contact (18-20 ga.)
21896-0003	Pin Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Part Number	Description
46627-0740	**6 Pin Receptacle Kit, Flat**
21895-0006	Receptacle Body (female)
21896-0001	Pin Contact (18-20 ga.)
21896-0003	Pin Contact (14-16 ga.)
21897-0001	Seal, hole (18-20 ga.)
21897-0002	Seal, hole (14-16 ga.)

Dust Cap Plugs & Receptacles

Weather Pack

45790-2860
1 pin Dust Cap Plug

46695-0490
1 pin Dust Cap Receptacle

46421-1320
2 pin Dust Cap Plug

46421-1330
2 pin Dust Cap Receptacle

46421-1090
3 pin Dust Cap Plug

46421-1100
3 pin Dust Cap Receptacle

46421-1110
4 pin Square
Dust Cap Plug

46421-1120
4 pin Square Dust
Cap Receptacle

46421-1610
4 pin Straight
Dust Cap Plug

46421-1600
4 pin Straight Dust
Cap Receptacle

46421-1340
6 pin Dust Cap Plug

46421-1590
6 pin Dust Cap Receptacle

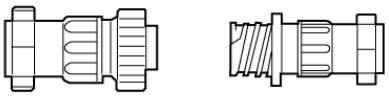
Connectors & Kits

AMP

Part Number	Description
11059-0007	**4 Pin w/Locking Ring Kit**
21090-0001	Plug Body
21090-0004	Connector Body
21088-0001	Socket Contact (20-24 ga.)
21088-0002	Socket Contact (14-18 ga.)
21089-0001	Pin Contact (20-24 ga.)
21089-0002	Pin Contact (14-18 ga.)
21092-0001	Clamp

Part Number	Description
11059-0008	**4 Pin without Locking Ring Kit**
21091-0001	Connector Body
21091-0003	Connector Body
21088-0001	Socket Contact (20-24 ga.)
21088-0002	Socket Contact (14-18 ga.)
21089-0001	Pin Contact (20-24 ga.)
21089-0002	Pin Contact (14-18 ga.)
21092-0001	Clamp

Part Number	Description
11059-0009	**9 Pin with Locking Ring Kit**
21090-0006	Connector Body
21088-0001	Socket Contact (20-24 ga.)
21088-0002	Socket Contact (14-18 ga.)
21092-0004	Clamp

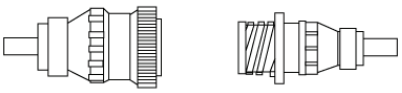


Part Number	Description
11059-0010	**6 Pin without Locking Ring Kit**
21091-0006	Connector Body
21089-0001	Pin Contact (20-24 ga.)
21089-0002	Pin Contact (14-18 ga.)
21092-0004	Clamp

Part Number	Description
11059-0011	**14 Pin with Locking Ring Kit**
21090-0003	Connector Body
21088-0001	Socket Contact (20-24 ga.)
21088-0002	Socket Contact (14-18 ga.)
21092-0007	Clamp

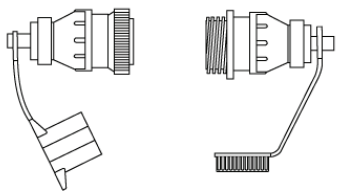
Part Number	Description
11059-0012	**14 Pin without Locking Ring Kit**
21091-0004	Connector Body
21089-0001	Pin Contact (20-24 ga.)
21089-0002	Pin Contact (14-18 ga.)
21092-0007	Clamp

Part Number	Description
11059-0013	**16 Pin with Locking Ring Kit**
21090-0002	Connector Body
21088-0001	Socket Contact (20-24 ga.)
21088-0002	Socket Contact (14-18 ga.)
21092-0007	Clamp



Part Number	Description
11059-0014	**16 Pin without Locking Ring Kit**
21091-0002	Connector Body
21089-0001	Pin Contact (20-24 ga.)
21089-0002	Pin Contact (14-18 ga.)
21092-0007	Clamp

Part Number	Description
11059-0005	**37 Pin with Locking Ring Kit**
21090-0005	Connector Body
21088-0001	Socket Contact (20-24 ga.)
21088-0002	Socket Contact (14-18 ga.)
21092-0003	Clamp



Part Number	Description
11059-0016	**37 Pin without Locking Ring Kit**
21101-0005	Connector Body
21089-0001	Pin Contact (20-24 ga.)
21089-0002	Pin Contact (14-18 ga.)
21092-0003	Clamp

Specifications subject to change without notice.

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